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Original Articles.

DRUG USERS IN COURT.

By V. V. ANDERSON, M.D., M.A., BOSTON,

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FOR the purposes of this paper a group of seventy drug addicts was taken. As no other basis for investigation was required than their use of drugs, we were able to include every case as it came.

Those problems considered worthy of attack in order that the court might get a more intelligent understanding of these individuals were their physical and mental condition and industrial efficiency.

More particularly was an attempt made to get at the true mental make-up of drug users in order to see what, if any, deviations existed prior to their use of drugs, with the end in view of seeking an explanation for the high percentage of failures in treatment. The apparent futility of cures is a well known fact. Though they may get off of the drug, the majority of users sooner or later return to it.

Just what were the factors within the individuals themselves that accounted for the apparent failure on the part of fully developed drug addicts to be cured, we wished, so far as the limitations of such a study permitted, to determine.

The following table indicates the offenses for which these individuals were arrested and brought to court:—

TABLE OF ARRESTS.

OFFENSE	No. of ARRESTS
Drunkenness	17
Larceny	52
Offenses against chastity	68
Assault and battery	3
Breaking drug law	61
Suspicious person	1
Breaking and entering	5
Surrendered on probation	21
Vagrancy	4
Gaming	1
Disturbing the peace	1
Stubborn child	1
Non-support	1
	296

Being addicted to habit-forming drugs, it may seem like elaborating the obvious to state that these individuals will not respond to ordinary measures of court treatment, but require special consideration. This is a fact, and it is demonstrated very definitely in the following table:—

TABLE OF DISPOSITION AND RESULTS.

No. GIVEN PROBATION	SATISFACTORY ON PROBATION	UNSATISFACTORY ON PROBATION	STILL ON PROBATION	NOT TRIED ON PROBATION	TOTAL
59	6	34	19	11	70
or	or	or	or	or	or
84.3%	8.6%	48.6%	27.1%	15.7%	100%

84.3% were placed on probation, 57.4% of whom proved distinctly unsatisfactory and had to be surrendered to the court.

27.1% of the total number of cases are still on probation, of whom more than one half are at present being handled within non-penal institutions.

8.6% proved satisfactory on outside treatment, while 15.7% were from the first regarded by the court as inside cases, needing detention rather than outside probation.

Correlated very closely with these facts are those of their industrial efficiency.

TABLE OF INDUSTRIAL EFFICIENCY.

REGULARLY EMPLOYED.	IRREGULARLY EMPLOYED.	Odd Jobs.	NOT WORKING AT ALL.	HOUSEWORK AT HOME.	TOTAL.
5	19	14	30	42	70
or	or	or	or	or	or
7.1%	27.1%	20%	43%	2.8%	100%

65.8% of these cases, or practically two-thirds, could not be considered self-supporting.

One may very well object that these facts are fairly well known; the failure in industrial efficiency, the unprofitableness of ordinary methods of treatment, the poor showing on probation—these facts are common knowledge and our only excuse for presenting them here is for the purpose of correlating them with such fundamental and underlying causes of these conditions as are found within the individuals themselves.

TABLE OF PHYSICAL FINDINGS.

Chronic bronchitis	3
Tuberculosis	8
Serious physical impairment from drugs	36
Venereal disease	23
Heart disease	3
Chronic rhinitis	3
Tape worm	1
Abscess in throat	1
Sciatica	1
Pelvic disease, other than venereal	4
Asthma	3
Thyroid disease	1

The industrial inefficiency above referred to may very well find an adequate explanation in such physical conditions. But more important still are the mental data. It is here we shall find the most satisfactory answer to the question as to why the drug addict's problem is not solved by merely getting him off the drug; why sure cures do not cure; and why short periods of treatment are so futile.

The application of mental tests to these individuals gave the following levels of intelligence:—

TABLE OF MENTAL LEVEL.

9 TO 10 YRS.	10 TO 11 YRS.	11 TO 12 YRS.	SUB-NORMAL.	ABEY.
12	13	13	18	14
or	or	or	or	or
17.3%	18.5%	18.5%	25.7%	20%

54.3% had a mental level below 12 years; 45.7% above 12 years. Such facts find their fullest significance in the following table of diagnosis:—

TABLE OF MENTAL CLASSIFICATION.

FEEBLE-MINDED.	SUB-NORMAL MENTALITY.	PSYCHOPATHIC PERSONALITY.	EPILEPSY.	NORMAL INTELLIGENCE WITH FREQUENT TRANTS.	DRUG DETERIORATION.	DRUG PSYCHOSIS.
20	14	10	1	13	10	2
or	or	or	or	or	or	or
28.5%	20%	14.3%	1.5%	18.5%	14.3%	2.8%

81.5% suffered from some form of mental handicap. Either, on the one hand, definite deterioration or disease from drugs, or, on the other hand, mental defect and such prior to the use of drugs.

Is it any wonder, observing in such a large proportion of cases an innate mental weakness, a mentality that is defective and poorly balanced, or a psychopathic personality, that we find these individuals unable to combat the enslaving effects of narcotic drugs?

If 64.2% of drug users have definitely abnormal mentality prior to their use of drugs, then we have something of far more importance to consider in treating these cases than merely the symptoms of drug abstinence and bad environment.

Most important of all is to be taken into consideration the mentality of the individual and his ability to resist.

In the light of the above findings, we can more easily understand the basis of Reuben's statement that "those who have to treat addicts appreciate the futility of relying wholly on the innumerable pharmaceutical remedies so widely and variedly employed in combating the narcotic drug habit. Successful treatment does not end with discharge from hospital. The real struggle only begins at this stage."

And this is true, because in two-thirds of the cases we are dealing not with normal individuals, but with individuals whose minds are sub-standard, unstable, and poorly balanced.

Reuben very wisely says "one can see the hopelessness of attempting to treat narcotic drug addiction in private practice, especially while the patient is free to enjoy any quantity of drug he may desire, regardless of his physician's instructions. The honest physician should not undertake to treat such cases under such conditions."

SUMMARY.

The drug habitué in court is a more or less delinquent individual, appearing frequently because of larceny, offenses against chastity, and such. If put on outside probation, two-thirds of these individuals have either to be surrendered to the court or put in non-penal institutions. Two-thirds of the cases above studied

were not supporting themselves by legitimate means, suffered from physical conditions that greatly impaired their industrial efficiency and handicapped them in any fight they may have wished to wage against the enslaving effects of narcotic drugs.

81.5% showed some form of mental defect, psychopathic personality, or mental impairment from drugs, which in terms of will power meant impaired ability to resist.

In the light of the foregoing facts, we can understand why medicinal preparations alone do not cure; why short periods of treatment are so often futile.

In the light of the foregoing facts, we can question the wisdom of undertaking disposition or treatment of any drug case without determining beforehand his individual ability to profit thereby.

Further, we can strongly advise against trusting a drug user to cure himself, or expecting satisfactory results from any method that does not provide for prolonged detention, careful physical and mental rehabilitation, and upon discharge, well-directed medical and social service methods of treatment.

SHIFTLING, CHARLATAN AND VAGABOND: WHO THEY ARE AND HOW THEY ARISE.*

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AN interesting group of abnormals, found the whole world over, as commonplace as the sparrow and quite as drab and unattractive—unless one focus with special sentiment upon him—is the truant, shiftling and tramp, the good-for-nothing or “bum,” the swindler, rogue, pathological liar or charlatan, and last, but not least, the vagabond (mendicant, peddler, mountebank, etc., falling for the most part into the rubric of the latter). These individuals have a strange kinship among themselves, and a distinct relation, either remotely or intimately, with the problems of delinquency and crime—and their study leads into one of the most fascinating highways of psychopathology and psychopathically engendered wrong, with byways into alluring fields of story and romance.

Who are they, how do they arise, and how do they transmit? Are their offspring like themselves? Does the truant, for instance, who

becomes the good-for-nothing shiftling, have shiftlings for children?

The real truant, to begin with, is the psychopathic child who suddenly “runs away,” mostly not knowing why, overcome by an acute inner *impellance* to “go,” to “shift somewhere,” to be “off in the open.” He not only cuts school, he strays from home. After we eliminate the epileptic and hysterical fugues (*automatisme ambulatoire*) we still have a large class of such dromomanies to deal with* in whom a strange nomadic unrest is rife and latent, and in whom some simple provocation (pique, quarrel or even less) sets off an intense dysphoria that starts the process going. They may or may not return; but one thing is certain, they will soon “hie hence” again. Such lives are not infrequently spent in constant aimless wanderings.

These, then, are the later shiftlings who stick to nothing, who are chronically dissatisfied, who can never attain enough stability to achieve anything—a trade, a livelihood, an ambition, a home and family. They just shift. One finds them among both the ignorant and the intelligent (many of the *instables* and *déséquilibrés* of the French belonging here). Among the women not a few are finally found in the ranks of prostitution. This condition must not be considered an entity, but just a manifestation of psychopathy, with lability of mood, and the proneness to dissatisfaction (dysphoria) as the most prominent characteristics. Should there be children, the hereditary transmission is that of psychopathy, mild or severe.

The good-for-nothing† (corner loafer, gadabout, bum, etc.) is another type found wherever earth is travelled over, who through an inferiority in moral make-up, a lack of cortical “backbone,” as it were, is utterly unable to maintain himself in even the most elementary trappings as a member of a community. He is wanting in self-esteem and honor, and hence can awaken no regard in others. What you or “society” may think of his appearance or deportment does not concern him. The opprobrium attached to failure, to not-getting-on, to the complete disregard of paying debts, to laziness, tatters, filth, leaves him quite untouched. He is *characterless*. With special nicety one may say of such an individual that he has no *respectability*,—no one respects him. This is the “Lump” of the Germans, our nearest equivalent being probably “bum” (with a slightly

* See A. Pick, “Ueber einige bedeutsame Psycho-Neurosen des Kindesalters,” Halle, 1904. Pick speaks of the condition as arising out of the soil of “Psychasthenia.” He does not, however, mean the psychasthenia of Janet, but constitutional psychopathy. See Ziehen’s studies of the Psychoneurotic Constitution; also the author’s paper (Med. Review of Reviews, March, 1912) and literature therein cited. See also the monograph of E. Stier, “Wandertrieb und Pathologisches Fortlaufen bei Kindern,” Jena, 1913; part iv of A. Culler’s “Les frontières de la folie,” Paris, 1889; E. Maurice’s “Les fugues chez les enfants,” Paris, 1900; Hermann Müller’s “Vom Wandertrieb,” Zeit. f. d. Erforsch. und Behand. des Jugend. Schwach. Bd. v, 1912; Heilbronner, “Über Fugues,” Jahr. f. Psychiatrie, 1903.

† See the chapter “Lumpen, Bummier und Vagabunden” in Pelman’s “Psychische Grenzgebiete,” Bonn, 1912. Many interesting facts will also be found in Jacob Rie’s “How the Other Half Lives,” 1890.

* This is the third of a series of studies on heredity (in its relation to psychopathy, clinical psychology and criminology) and the differentiation of abnormal types of character and personality. For the general discussion, see *Medical Record*, Feb. 24, 1917; for the study of the degenerate, etc., see *The Archives of Diagnosis*, April-May, 1917.

different shading). *He will not work.** He sees no need of earning or saving, or indeed of possessing anything. He shuffles passively through life, eking out his miserable existence through borrowing, begging and taking.†

But even for this poor mortal it may at times become difficult to keep life and limb together, and, *not being constituted for work*, his appropriation assumes more formidable proportions—he steals. This practice may then become common habit. Need and chance accident may even lead to felony and murder. Here we have a special type of delinquency and especial *genre* of criminal to keep in mind.‡

The same good-for-nothing may, oddly enough, have a tendency to venerate his ill-fame in quilted colors. He tells wild-goose tales of escapades, and puts point and effect to the meanest matter. Thus we get the conventional braggard and liar—a character of all times. Though quite callous to his real condition, he nevertheless tries to play a part in the eyes of others. With a little better intelligence we have the swindler and charlatan. The lying of these individuals is frequently of a peculiar kind, a mingling of small fact with abundant fancy (confabulation) and an added inkling to credulity in their own fabrications, even a tendency at times to pose as the actual of a highly fictitious part (*pseudologia phantastica* or pathological lying).§ It must always be remembered that this lying does not count for lying in such abnormal minds—it is really believed. The Korsakoff psychosis also confabulates, though in a somewhat dissimilar way, falsifying monstrously, and, even though you point out the discrepancies, remains quite unconcerned.

The names of Daudet, Immermann, etc., in our footnote take us quite some distance from the theme of "good-for-nothing," and lead over an interesting association bridge—the one terminal in story, the other in fact—to such characters in actual life who are surely "good-for-much," yet abnormal, exotic, *different*, who live hazy, mystic lives, half in the fiction of their own dreaming, and no little determined by really pathologic trends. Here we think of Shelley, Coleridge, DeQuincey, Verlaine, of poor

Chatterton and probably of our unhappy Poe, of visionaries like Blake, Swedenborg and Newman, and a list of hundreds of others, had we a peep into all the master souls. The strange mental motley of these higher typed individuals, the sincerity of whom we do not question, should teach us to be fairminded enough to weigh, and likewise accept as sincere the unusual combinations in the lower types as we see them, to endeavor to understand through *appreciation* rather than criticism, for appreciative analysis gives a fairer picture here than the critical. *Humani nihil a me alienum puto*. This might be our motto in deciphering and judging all the abnormals, good, bad and indifferent, high typed or low typed, brought before us. After all, there is a good bit of the fictitious even in much that we cherish as truth in our own minds—we supposed normals—and many of our plans, our dreams and our desires are more real for us, and more in keeping with our mental status than the soberest of our come-true realities.

The common vagabond is more than mere shifting. This class (again a very extensive world-class) is made up of physical and mental derelicts—usually both feeble-minded and psychopathic. Of 404 such chronic vagabonds (gewöhnheitsmässige Landstreichern) studied by Bonhöffer, 74% had to be called mentally abnormal, and at least 53% feeble-minded; 60% were chronic alcoholics, and quite a number epileptics. According to Ziehen† at least 30% are "hereditary degenerative psychopathic constitutions." "This vagabondage," writes Pelmann, "is the great reservoir out of which delinquency is resourced." Real criminals, however, are rare among them; they haven't the energy for this. As to the heritable transmissibility in these cases, it will be seen, this may be a rather complicated affair.

The above pathologic forms in varying combinations, especially with the admixture of intelligence or even talent or genius, give us some of the most interesting characters we happen upon in life and fiction. From this class come all our picaresque heroes of romance,* from Cervantes' "Don Quixote," Grimmelshausen's "Simplizissimus," Lesage's "Gil Blas," through the well-known characters drawn by a score of England's gypsy souls†—Defoe, Smollett, Scott, Borrow, Stevenson—to mention but a few—up to our more modern "beloved vagabonds" of Lock, R. H. Davis, Weir Mitchell and others. The vagabond has been perhaps the romantic top-notch of the group, but he has been only one of the many types out of rascaldom literarily portrayed for us. How near to human interest of today these types come one only recog-

* This recalcitrance to work is also found in families of "high degree" who are far too proud to work (but not to borrow and accept), who, though their *houses* have long since fallen into dilapidation, still stick to their pride, their hauteur and their traditions. Nor have they usually any great anxiety about paying their debts. Very probably we get our phrases "trumpety baron," "shoddy aristocrat," etc., from these types.

† Such types begin their careers very early in life, do not remain at school, are then tried at work, but cannot stick, soon take no more jobs, and "hang around" and deteriorate. Sometimes childhood and early adult life starts apparently fairly well, but drink rapidly demoralizes this individual. Most have very scant schooling, but must not be considered innately feeble-minded.

‡ This type, it should be remembered, is really not a criminal type in the strictest sense. These are passive individuals, never active seekers for trouble.

§ See "Die Pathologische Lüge und die Psychischen Schwinder," Anton Delbrück, Stuttgart, 1891; also chapter I of O. Hinrichsen's "Zur Psychologie und Psychopathologie des Dichters," Wiesbaden, 1911. A. McLane Hamilton reported an extremely interesting case in the Medical Record, vol. lxvii, p. 905. Splendid examples in literature are Daudet's, "Tartarin de Tarascon," Immermann's inimitable "Münchhausen," and Keller's "Der Grosse Heirich." Ibsen's "Peer Gynt" probably also belongs here.

* See, for instance, Chandler's "Romances of Roguery," Part I, MacMillan & Co.; also "The Literature of Roguery," in two volumes, Houghton, Mifflin & Co., 1907; also "Elizabethan Rogues and Vagabonds and their Representation in Contemporary Literature," F. Aydelotte, The Clarendon Press, Oxford, 1912.

† And England has been especially rich in these—Spain, however, having supplied the source and the beginning.

nizes when one thinks of the fame of "Raffles" and of "Sherlock Holmes" (to say nothing of Nick Carter!), and of the stage popularity of crime and detection, and the abnormal. Indeed, these elements of unrest, psychopathy, vagrancy, and the soon encountered company of poverty, uncleanness, immoderation and social disreputability upon which we righteous look with such sorry contempt, are all more deeply ingrained in the world's history—and our own natures—than we are usually aware. They are the secrets behind those great movements of the crusades (the children's crusade proved it), the Elizabethan and post-Elizabethan voyages and wanderings, the rush to the Klondike and our West; and out of these same elements sprang the Goliardi or itinerant students of the middle ages—that strange confraternity of the open road (*Socias sanctae confratiae*) and forerunner of the modern university! In spite of their learning, these scandalous students, were they here today, would be considered as outlawed to a community, as the men of Coxey's army, all of them candidates for prison internships, with a goodly overflow for the hospital and madhouse.*

It is perhaps not very far-fetched, after all, to say that we are, most of us, of the same stuff the other fellow's made of, only it is quantity, not quality, in the arrangement of the make-up that characterizes one from the other.

REFERENCES.

* Beiträge zur Kenntnis des grobstädtischen Bettel- und Vagabundentums. Berlin, 1900. See also Mönckmüller's "Eine Vagabundenfamilie," Monat. f. Kriminalpsych., 1907, and Willmann's "Zur Psychopathologie des Landstreichers," Zeit. f. Nerven u. Psych., 1904.

* Psychiatrie, Leipzig, 1908, p. 578.

CONCERNING THE END-RESULTS OF TREATMENT OF FRACTURE OF THE ELBOW.

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AND

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Of the various fields of surgical therapy the treatment of fractures has made the least advances in recent years. Therefore, in believing that something has been added in the effort to aid in clarifying present day views of fracture treatment, one is apt to cling tenaciously to, and to defend vigorously, such a notion. Certainly if the question appears of some importance, its defence by detailed argument is quite justifiable. Hence we believe that no further explanations are necessary if we take up and attempt to refute certain statements made by Ladd's con-

cerning our observations* of the end-results of the treatment of elbow fractures. If, as a corollary, we bring home the basic importance of accurate observation and related logical thinking, our second purpose in this presentation shall have been fulfilled.

In the first place, the meaning of end-result should be clearly understood. Much of the confusion that exists is undoubtedly due to the faulty use of terms. With Ashhurst and others we have defined a perfect end-result, in elbow fractures, as "one in which the full and normal range of motion is a sequel of the treatment of a fracture of the elbow. Anything short of this is termed an imperfect result. The latter may vary from a slight varus or valgus deformity and very little limitation of motion to marked change in the carrying angle and great limitation of motion." We wish to make an urgent plea for an absolutely strict adherence to these terms. As soon as individual interpretation of what one means by "a useful arm," "a good result," etc., comes into play, all standardization is lost, no two observers mean the same thing, progress—depending as it does in large part upon interchange and correlation of opinion and observation—is blocked. Therefore we feel that Ladd's view is fundamentally incorrect in the statement: "A decrease in the range of motion or a positional deflection which requires special examination for its detection is treated as negligible, which for all practical purposes is correct." We will not take issue with the question of "practical purposes," although one may mention in passing that what may be considered a "perfect arm" for a bricklayer need not necessarily be so for a violinist, for example. It is clear that we or any other critical readers of Ladd's contribution are at once put entirely at sea in an effort to learn if, in fact, his results are better than those obtained by others, if, therefore, his plan of treatment should be followed. When he states that in "slightly more than 91% of the (45 traced) cases a perfect arm has been secured," that statement should speak most strongly for his method of treatment. Since, however, it is not clear whether or not there were slight imperfections in some of those arms, one finds it quite impossible to ascertain the significance of such observations. We need only mention that Ladd terms "perfect" two of four (operative) cases in which slight valgus resulted. We have not attempted to estimate, and no one but Ladd can say what the percentage of perfect results would be if he had adhered to an objective rather than to a personal interpretation of end results, although it is evident the percentage would not be so high.

Put in another way, the foregoing part of the discussion demonstrates that if results of treatment are to be recorded, if we are to learn how to treat fractures correctly, it is absolutely essential that there be universal agreement upon a uniform classification, based upon an objective,

* See the introduction to the translation of the *Carmina Burana* by John Addington Symonds, under title of "Wine, Women and Song," and the songs themselves. Th. B. Mosher Co., Portland, Me., 1899; also the reprint (1849) "The Fraternity of Vagabonds" by Awdley, "A Sermon in Praise of Thieves and Thievery," by Halen, and "A Caveat or Warning for Common Cursetors," by Harmon, all three in one volume, Trubner & Co., London, MDCCCLXIX.

not a personal, interpretation of results. Turning to Ladd's criticisms of our observations, we wish to take them up one by one.

"The Neuhoof and Wolf cases do not appear to me to establish the value of early mobilization and massage, and there is no small amount of intrinsic evidence in the study of their unsuccessful cases that callus is, at times, increased by the treatment. Their successful cases seem to be the result of proper reduction and immobilization in the Jones' position rather than the result of after treatment." We reported 95.5% of objectively perfect results (22 of 23 cases) when fractured elbows were treated by combining immobilization in hyperflexion with early passive movements and massage. With that same rigid classification, the best previous figures were given by Ashhurst, who immobilized in hyperflexion for several weeks and did not employ massage and mobilization. His percentage of perfect results was 81. Before the systematic use of hyperflexion, the average of perfect results reported by careful observers of large groups of cases was 23.25%. Therefore, since our figures are not doubted by Ladd, we have established the value of early mobilization and massage for elbow fractures, when combined with the hyperflexed posture.

We have carefully rescrutinized our cases to determine if there is any "intrinsic evidence" that callus is increased by passive movements and massage. The question of increased callus during the course of such treatment is an open one, according to many observers, but need not concern us here, for Ladd is referring to excessive callus at the time that observations of end-results are made. In none of our cases in which hyperflexion was combined with early massage and mobilization was there any evidence of excessive callus, nor do our notes in any way indicate it. Therefore it is impossible to see upon what Ladd bases his statement. We agree with Ladd and have clearly shown that hyperflexion and proper reduction are most important in the result, but we have also demonstrated the importance of after-treatment. Concerning the question of "proper reduction" our series of cases demonstrates that perfect results were obtained in a few cases in which reduction was incomplete, and in a few in which proper reduction was manifestly impossible owing to extensive comminution.

"To prove their contention they should present cases put up in acute flexion, after proper reduction, not having early massage and passive motion and giving poor results. This they fail

to do, and I have failed to find that such is the case from a fairly careful review of the literature, or from our experience." We do state, that "before combining mobilization and massage with hyperflexion, a series of elbow fractures were treated by hyperflexion alone, that the results were more satisfactory than those obtained by fixation in other positions, but by no means entirely satisfactory." But is it necessary to prove this when Ashhurst had already done so and obtained only 81% of perfect results in a very large series of cases? Surely to doom two out of every 10 children (elbow fracture is chiefly an injury of childhood) to go through life with an imperfection of an arm, be it ever so slight, cannot be deemed the last word in the treatment of elbow fractures. Concerning Ladd's personal experiences we have already stated that his percentage of perfect results cannot be determined from his report.

"The high proportion of failure in their cases as a whole, 53%, may be ascribed partly to the fact that many cases were referred late after having been improperly reduced, or immobilized, by other surgeons, and possibly to unusually great deformity." In the first place, we consider it most inaccurate to refer to the high proportion of "failure." What is generally understood by failure is a very poor result,—ankylosis, great deformity of the carrying angle, or excessive limitation in the range of motion. Ladd will certainly agree that a perusal of our cases reveals very few failures in this sense. He no doubt meant to refer to imperfect results. The percentage of these imperfect results was 47, and not 53, as stated by Ladd. The displacement of fragments in our series of 100 cases naturally varied within the wide limits of any such large series of cases, so that it cannot be thought that the deformities were unusually great in the series as a whole. Nor can "improper reduction" be offered as the common cause for imperfect results, as an analysis of our case-histories will demonstrate; for our study proves that prolonged immobilization in correct position, or short periods of fixation in incorrect position—even with adequate reduction—also yield a considerable proportion of the imperfect results.

"A comparison of the perfect and imperfect results shows that the imperfect cases equal or exceed the perfect cases upon mobilization and massage treatment in all groups except the one in which, in addition to the advantage of the Jones' position of hyperflexion, the cases pre-

		PERFECT RESULTS WITH MODERATE TO MARKED DISPLACEMENT	PERFECT RESULTS WITH SLIGHT TO NO DISPLACEMENT
Hyperflexion	Early mobilization and massage	92.3% (13 cases)	100.0% (10 cases)
No hyperflexion	Early mobilization and massage	40.0% (10 cases)	63.6% (22 cases)
No hyperflexion	Late mobilization and massage	12.5% (8 cases)	38.5% (13 cases)

sented in general slight displacements, generally posterior." To refute the last part of this statement and to make a final attempt to establish the significance of hyperflexion combined with early passive movements and massage, we will conclude with the following table. It contains those cases in which the histories detailed in our paper stated if displacements were "moderate" to "marked," or "slight" to none. The cases in which the type of displacement is not definitely indicated or is not mentioned, and the small group of ulna fractures, in which hyperflexion is not in question, are excluded. We regret that such a table, based on the question of relation of extent of displacement to results obtained, did not appear in our paper. We are glad to have the opportunity to present it in this place.

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Memorial Addresses.*

EDWARD MARSHALL BUCKINGHAM, M. D.

BY GEORGE W. GAY, M.D., BOSTON.

FOR more than seventy years the Drs. Buckingham, father and son, have occupied a prominent position in the medical profession in New England. They came from an intellectual stock whose members had that sterling character and strong personality that gave them an influence in this community for upwards of a century.

Joseph T. Buckingham, the grandfather of the subject of this sketch, was the well known editor and proprietor of the *Boston Courier and New England Magazine* in the earlier part of the last century. He had thirteen children, ten of them being boys. Of the five who came to manhood, two entered the ministry, one became a prominent lawyer in Chicago, one a linguist and teacher in the English High School and the other was the distinguished physician so highly esteemed by the generation now fast passing away. A few words in relation to the career of the latter may not be amiss upon this occasion.

Charles Edward Buckingham, the son of Joseph T., was born in Boston in 1821 and died in 1877. He graduated A. B. at Harvard College in 1840 and M. D. in 1844. He at once took an active part in affairs. He was one of the organizers of and professors in the Boylston Medical School. Later he became a lecturer in the Harvard Medical School and in 1868 was made Professor of Obstetrics and Medical Jurisprudence in that institution, a position that he occupied the remainder of his life. He was active in the reorganization of this school in the early 70's, an event that had so much to do in elevating the

standard of medical education in this country. He also assisted in establishing the Massachusetts State Board of Health and the Boston Medical Library. He rendered valuable service to the BOSTON MEDICAL AND SURGICAL JOURNAL at a critical period of its existence. He was a member of the original surgical staff of the Boston City Hospital, later consulting surgeon to that institution, Consulting Physician of the Boston Lying-in Hospital, a Fellow of the London Obstetrical Society and member of numerous other societies and organizations.

To young practitioners he was kindness and consideration personified. His generosity eased many a young physician's pay day. Socially he was an ideal companion. Stimulating, alert, resourceful, one never left his presence without having received useful hints and renewed interest in his work. Upon one occasion the writer consulted him in relation to an obscure affection of a young lady's ankle. After hearing the story, he quietly went to his bookcase and taking down Sir Benjamin Brodie's work on hysterical joints, said, "Take that book home, doctor, and look it over. I think it will help you." From that day to this, now nearly half a century, the writer has never failed to recognize a neurotic joint. He was an admirable practitioner and a brilliant clinician with an abiding faith in certain drugs, of which the chief was opium. He had no superior and few equals in the use of that prince of remedies. When the clinical thermometer was little more than a crude and expensive curiosity, Dr. Buckingham said, "sometime, by and by, this will come of use and be adopted." He did his share in bringing about this result. He was, indeed, a rare man; brusque, forceful, positive, yet gentle, considerate, and kindly to the rich and poor alike. That his patients idolized him is shown by the fact that they erected a beautiful monument to his memory in Mount Auburn.

Such, in brief, was the heredity of Edward Marshall Buckingham. He was the only son in a family of three children of Charles Edward and Mary Elizabeth (Marshall) Buckingham and was born in Beech Street, Boston, on August 9, 1848. He was educated in the public and private schools of his native city and entered the Massachusetts Institute of Technology in the class of 1870. Having taken a course in civil engineering and done some surveying, he was seized with pneumonia, which interrupted his career in that direction. He then, much to his father's delight, entered the Harvard Medical School. Graduating in 1874, he served for a time as house surgical pupil at the Massachusetts General Hospital, then went to Vienna for a year's study. Upon his return home he found his father a semi-invalid from a serious cardiac affection and his large practice slowly being scattered. Dr. Buckingham settled at the South End, near his father, and went to work with vigor and determination. His first public service was

* Read before the Boston Society for Medical Improvement, Jan. 29, 1917.

at the Boston Dispensary, to be followed by work in many other institutions. During his entire professional life he did a great deal of charity work. He was visiting physician at the City Hospital and for several years was the efficient secretary of the staff. He was also visiting physician at the Children's Hospital, in fact he paid special attention to diseases of children throughout his career.

He wrote numerous articles for the medical journals and the City Hospital reports, among which may be mentioned, Influenza, Difficult Dentition, Malaria in Children, Tropical Diseases, the Communicability of Cerebro-Spinal Meningitis, Gastric and Duodenal Ulcers, and the Protection of Milk. His papers were vigorous, positive and frank. Like his father, he had an impressive manner of saying, "I don't know!" It inspired a confidence in his honesty. He told the plain truth, as he understood it, regardless of accepted theories, and was ready to defend his opinions. He was a progressive conservative. As Dr. Post has well said: "He was a keen critic; often considered a conservative, but always receptive of new ideas, which he usually received with some modifications of his own."

Like his father, he was an excellent family practitioner; alert, faithful, candid. "He saw with his own eyes, listened with his own ears, felt with his own hands and was the disciple of no man." Quick to call assistance in cases that were serious, or that he did not understand. He never forgot the personal equation in his practice. His patients were not only "cases," but they were persons like himself, meriting careful consideration in all directions. He did not send patients with limited means to Palm Beach, nor order a course of treatment that he knew they could not afford. He supplied many poor people with medicine and other necessities at his own expense. Their needs were his first consideration. He was a thoroughly conscientious, self-sacrificing physician who won the confidence and esteem of all with whom he came in contact.

As might be supposed, Dr. Buckingham belonged to several medical associations and was a constant attendant upon the meetings, often serving as secretary, or in some other capacity. He was a member of the American Medical Association, Massachusetts Medical Society, Boston Society for Medical Improvement, etc. He was vice-president of the American Pediatric Society and president of the New England Pediatric Society. For twenty years he held the responsible position of treasurer of the Massachusetts Medical Society to the satisfaction of its 3,600 members. Prompt, efficient, reliable, ever watchful of the Society's interests, his vacancy will not be easily filled. His service merits the lasting appreciation of the Society.

Dr. Buckingham was an omnivorous reader, preferring that recreation to almost any other pastime. He was especially fond of history and was well versed in American history. He

studied it with his children not only for the facts recorded, but also for the purpose of ascertaining the trend of affairs. He was blessed with a fine memory and his historical studies made him unusually accomplished in that direction. He was also a constant reader of fiction. He was fond of martial music, but cared little for any other sort. While not a member of any military organization, yet he was much interested in military tactics from early boyhood throughout his entire life. There was nothing of the sportsman about him. He was particularly fond of the mountains and spent his vacations among them so far as possible. The Presidential Range had peculiar attractions for him. He met the same friends there year after year and spent some of his happiest days roaming over that region.

Dr. Buckingham's early choice of a technical training very likely may account for his great and abiding interest in the railroad problems of this country. He was particularly well versed in these matters. He made a study of the subject. He knew the history, the growth, the mergers, the combinations of the principal lines and was also posted as to routes, connections, etc. As might be expected, his studies gave him no confidence in government ownership of these corporations.

In December, 1876, Dr. Buckingham married Miss Alice Darracott, daughter of Joseph and Sarah C. (Darracott) Nason of New York. The doctor was essentially domestic in his tastes and his home life was an unusually happy one. He is survived by his widow and two daughters, Miss Edith Nason and Margaret, wife of Professor Addison Gulick of the University of Missouri at Columbia, Mo.

About five years ago Dr. Buckingham began to have slight attacks of angina. They consisted of the characteristic "breast pang" and numbness of the left arm. They recurred three or four times each year, but lasted only a few moments. He said nothing to any one about the matter, but kept about his usual duties until a short time before his death, when he was seized with a severe attack which was relieved by hypodermic morphia. A few hours later, however, while resting comfortably, the heart suddenly stopped and all was over. His remains, like those of several other prominent physicians who have recently passed away, were cremated and rest at Mt. Auburn.

The following quotation from the Talmud, taken from the doctor's book of medical notes of 1879, may well close this imperfect sketch of a noble life.

"The day is short, and work is great; the reward is also great, and the Master presses. It is not incumbent on thee to complete the work, but thou must not therefore cease from it."

DR. WALTER JAMES DODD.

By C. A. PORTER, M.D., BOSTON.

IN 1892 there came to the Massachusetts General Hospital a young man, Walter Dodd by name, to fill the position of assistant apothecary. Born in London, he came here at the age of nine to live with relatives in Somerville. A few years of schooling, a few more years with the Oriental Tea Company, and then a desire to go to sea possessed him. But after a talk with Ex-president Eliot, who was attracted by his modesty and quality, he decided to study chemistry at Harvard under Professors Jackson and Hill.

Last December, a little before Christmas, Dr. Walter Dodd died in his own house on Marlborough street, more respected and more beloved than any other member of the staff.

During his first years at the hospital he was interested in photography and all the house officers and others are indebted to him for pleasant reminiscences of the old place and old times. His knowledge of chemistry and drugs, combined with his invariably good nature, made him an invaluable consultant. For example, I remember a particularly clever neurotic morphine addict who had been treated before and knew valerian when she smelled it. After several attempts Mr. Dodd invented a combination which completely deceived her and to this day is lost to medical art.

In 1896, the year of Roentgen's discovery, he had been appointed apothecary and photographer to the hospital. With his friend, Dr. Codman, he began work in March with a large static machine borrowed from the Neurological Department. In October he acquired a powerful 12-inch induction coil. After his regular duties were finished he literally burnt the midnight ray working enthusiastically all his spare time, utterly ignorant of any danger, until in November the rays burnt him. Immediately after his recovery he was again at work until in April, 1897, a severe general dermatitis with excruciating pain forced him to lay off. In July, at his suggestion, the first graft was applied to a chronic ulcer on the left forefinger. The operation was successful and was followed by immediate relief from pain. Within a month Mr. Joseph Godsoe, then assistant apothecary, recalls him, both hands in splints, working all night in the old Kingsley Studio in a temperature of 110°, with a cake of ice in the developing fluid to keep the films from leaving the glass. When morning came both men were in the apothecary shop as usual, performing their routine work and awaiting evening to return to the x-rays.

Many operations followed in spite of which Mr. Dodd kept continuously at work. In December, 1901, the whole surgical staff joined in giving him an engraved gold watch and chain as a slight acknowledgment of his devoted sacrifices. His rare pleasure on receiving this unexpected

token was good to see and to remember. In 1902 malignant disease first appeared, requiring amputation of two fingers, followed by a dozen more operations in the next three years. As an illustration of the grave humor of the man I shall always remember him one morning in May, 1905, coming down the hospital corridor with his characteristic gait, and an unusually happy smile on his face. He asked me whether I noticed anything queer about him. I said: "No." "Don't you see that I have had both hands in my trousers pockets and not a dressing on either?" It was the first time in eight years that he had been able to do this.

In 1908 he received his decree from the Vermont Medical College, immediately followed by his appointment as Roentgenologist to the hospital, and in 1909, instructor at the Harvard Medical School. In the meantime the work of his department was increasing almost beyond bounds. To bone and foreign-body work was added the therapeutic use of the x-ray. Then came bismuth and collargol injections with all that these have meant in diagnosis to medicine and surgery. In spite of loyal assistants working overtime, the x-ray department had hard work to keep up with the routine demands. If anybody wished to see a plate, give a lecture, or show lantern slides, Dr. Dodd was always ready with the material, and in spite of his mutilations, frequently arranged things with his own hands. These increasing deformities, combined with a naturally shy disposition and unwillingness to ask help from others, made him avoid society and any amusement outside of the hospital. Finally a friend insisted upon taking him out to dine, and himself wore gloves. This broke the ice and from now on his really social nature had opportunity to expand. His love for singing and natural talents as an actor made him unusually popular with the house-officers and at all of the gatherings of the Massachusetts General Hospital Alumni. He was noted for his stories at all times and places which were full of kindly wit, playing, like heat lightning, about the vagaries of human nature.

In 1909, after consultation with friends, he determined to open a private x-ray plant at 259 Beacon Street with Dr. Ariel George. In 1910 he married Margaret Lea, and for the first time was thoroughly happy. His practice increased, he spent the summers at Point Allerton where it was his pleasure, after long years of institution work, to entertain his friends. His devotion to young Burnham Porter grew with years, and many happy days did the boy have helping Dodd work in his garden and wondering at what he accomplished with his grey-gloved hands.

When war was declared Dr. Dodd, an Englishman, was eager to help. The first Harvard Unit, for which he was to act as Roentgenologist, was to sail in June, 1915. A severe operation on the hand with an axillary dissection, would have deterred most men from any idea of this trip, but

Dr. Dodd, accompanied by his wife, with wounds unhealed, arrived in an ambulance at the train and planned to convalesce from the operation on the ocean and while on service in France. The character of his work and his qualities while on duty, Dr. Roger Lee will describe.

Upon his return in October, 1915, his general condition was better than it had ever been. He had served a cause that he loved, had made himself popular with patients and doctors alike, and in a characteristic way had picked up more knowledge and more anecdotes than any other member of the unit. During the beginning of 1916 he was very well and making plans to purchase a house, and by further division of labor to enlarge his usefulness and commence some writing. In the summer a sudden infection with chills developed and the epitrochlear and axillary glands quickly enlarged. He lost weight and had continuous fever. In spite of this he purchased his house. In August a gland at the elbow was removed and found infected both with pus and cancer. A very thorough dissection of the axilla followed, from which, for the first time he showed little tendency to react. There developed a persistent and racking cough which could not be explained, though all, including himself, feared metastases. In November it became clear that both lungs were involved. During the last days of his illness he was always thinking of others, would brighten up to see a friend or tell a story, but for the most part was dreaming in a mild delirium of past incidents in his life and the happy days in France. There was ever a meaning in these wanderings, though often his wife and friends did not understand. With a whimsical smile he would frequently correct some misuse of words or flighty ideas. On December 16th he died, having, in his short life, accomplished all that makes life worth living. Through pain and suffering he had forgotten himself and thought only of his work. He had become an authority, his unbiased conservative opinions carried conviction. In the medical societies he rarely spoke, but when he did, all listened. He had been loyal to the hospital; his wife looked after him with devoted care; he had hosts of friends. In his own calm, serene way he had shown us that pain and operations were mere incidents. He has taught us how to live and how to die.

Before a recent operation he wrote a will giving \$100 to start an endowment fund for the x-ray department. These were his words:—"With the hope that others who can afford more will give according to their means."

WALTER DODD IN FRANCE IN 1915.

BY ROGER I. LEE, M.D., CAMBRIDGE, MASS.

ONE morning in the spring of 1915, Walter Dodd hunted me up at the hospital and said he wanted to have an important talk with me. He had just heard about the Harvard Unit and was

fired with enthusiasm to go with the unit and to be of service to the afflicted in Europe. He felt he might have to be looked after a little and hoped in case of need Dr. Porter and I would consent to do what he termed "that great favor." But the real problem to him and concerning which he wanted advice was whether in my opinion his presence might inconvenience the unit on account of the possible extension of the disease while he was abroad. Very calmly and quietly he talked of the inevitable outcome. He had accepted that. To his mind the sole consideration was that the occurrence of the inevitable outcome should not in any way handicap the work of the unit. I attempted to put forth my own point of view, that if ever a man was entitled to the comforts of home he was that man. Since it was quite uncertain where the Harvard Unit would be or under what conditions it would live, it was unnecessary for Walter Dodd to exchange the well deserved comforts of his home for the possible hardships and possible overwork in behalf of any cause, no matter how good. However, Walter abruptly ended that particular argument by saying that the considerations that I had brought forth neither interested nor influenced him.

When it was finally decided that Walter would be a member of the unit he was operated on again. He left his house in Allerton in an ambulance to take the boat train for New York. No one, I think, could fail to be impressed by this picture. Both his hands were bandaged, one was greatly swollen. He had put on his "store clothes," as he always called them, for the first time after operation to begin the journey. It seemed indeed remarkable that this man was on his way to the war-zone to help others. On the boat many of the doctors and nurses of the Harvard Unit first learned to know this cheerful, genial, lovable, kindly soul. Always quiet and retiring, nevertheless he was the centre and ringleader of the fun and merriment on the ship.

In England most of the unit were much disturbed because it was not known even then just where the unit was going. While we were bothering about petty details of our equipment the one man whose entire work depended upon his equipment refused to attempt to anticipate possible difficulties of details of equipment. He made a careful survey of the general nature of the work and of the general problems involved.

London was as ever a source of joy to Walter. He was born there. He derived much amusement from recalling incidents in his youth, particularly his escapades as a boy of eight in his attempts to be an actor. The London Cockney was a never-ending source of pleasure. His whimsical mind fashioned many a good story out of bits of conversation, and his good imitative powers and histrionic ability added greatly to the telling of these stories. Often late at night during the inactivity of the unit in Lon-

don he became reminiscent but always reminiscent of things that were pleasant. He spoke of his work but never of his operations. He spoke many times of his great good fortunes. He considered himself most happy in all of his associations, in his associations with the hospital, the University, with his friends and his wife. He liked to recall that he had been associated with Harvard University and Harvard men almost continuously for thirty years. His University associations dated back to the chemical laboratory where he became a laboratory boy at the suggestion of President Eliot. Doubtless Mr. Eliot has long since forgotten the boy he dissuaded from going to sea, but Walter cherished the recollection of two very pleasant interviews with Mr. Eliot. He recalled with gratitude how much the Massachusetts General Hospital and the men at the Hospital had done for him, but never mentioned what he had done for the Massachusetts General Hospital or the Massachusetts General Hospital men. He felt himself particularly fortunate in being able to go with the Harvard Unit. Curiously enough in that unit were two of the men who assisted Dr. Porter at the first of the series of wonderful operations that preserved Walter Dodd for so many years.

When we finally moved to France and got under canvas Walter had one very fixed idea—no concessions were to be made for him and his infirmities. Gladly would everyone, from the Commanding Officer to the lowliest orderly, have done anything in his power to increase his comfort, but Walter would have none of it. Even when he had a recurrence of his old painful sacro-iliac trouble, the substitution of a hospital bed for his canvas cot had to be surreptitiously arranged. Even then some of us were in great disfavor for the brief time that this kindly soul could harbor resentment towards anyone. Very characteristically he had loaned the sacro-iliac corset without which he was not supposed to travel, to a rich patient who was similarly afflicted, and so won his sympathy, but who had forgotten to return it.

In the work of a base hospital one has the feeling that it is largely a question of well trained hands and well trained minds. With such a mass of material the individual, surgeon or physician, is more or less lost. Some men have better training, others are perhaps more skillful, but it is given to few to contribute anything that others could not contribute if not equally well or at least nearly as well.

Parenthetically an obvious exception may well be made of our American dentists, particularly Dr. Hopkins and Dr. Kazanjian of our unit. But extremely striking was the contribution of Walter Dodd in his particular field. Handicapped by his own infirmities, by inadequate and inferior equipment, by insufficient and untrained assistance he was at once the invaluable man of the unit, at once the man

that gave something to the surgeons and, of course, to the patients, that no one else could contribute. Walter had long since spoiled the men at the Massachusetts General Hospital because they relied implicitly on his opinion for their guidance. In France, in a remarkably brief period, all the men came to place absolute reliance, not so much on his actual findings, but upon his sane interpretation of those findings. Not infrequently decision of operation was left solely to his judgment. It required only a short experience to convince all the men that Walter Dodd's opinions were consistently sound and accurate.

For equipment he had a very ordinary field x-ray outfit. He had one unskilled helper and one partially trained man. He left them both expert technicians. He rejoiced at this meagre equipment because it recalled to him the struggles of the early days and he wanted to emphasize the fact that good work is possible in his specialty under all sorts of conditions. Of course, he horrified his technicians by tearing his machine to pieces and then reconstructing it after his own fashion. In the next hospital the x-ray equipment was modern, elaborate and complete. At first they were inclined to be patronizing concerning our little x-ray plant. It was not long, however, before Walter was called in consultation to help them out of very serious difficulties. After the first few weeks any x-ray difficulties in the surrounding hospitals meant an emergency call for Walter Dodd. The x-ray work at our hospital served as a standard. Never was a more striking illustration of the fact that it is the human equipment rather than the mechanical equipment that counts. An interesting instance of his wide experience and of his vast fund of available knowledge comes to mind. Two of us visiting a nearby hospital were shown an unusual case of a bony tumor with x-ray photographs. The date for amputation of the limb was set. We asked the privilege of showing these x-ray photographs to Walter Dodd. He immediately recognized the condition as a rare form of tumor in which amputation was not indicated but in which local eradication of the tumor with preservation of the limb would be entirely successful. It would be futile to multiply the examples of his skill, not only in making the Roentgenological findings but more particularly in his sane interpretation of the findings. More than any other individual and more than all the other individuals of our unit he determined the high standard of the excellent work done.

Those of us who were with this particular Harvard Unit perhaps think of Walter Dodd in terms of his personal qualities rather than in terms of his professional qualities. Great as his professional attributes were they seem pale in comparison with his personal attributes. Everyone came under the spell of that wonderful personality. Apparently he had a wide visual field

for all goodness and beauty but congenitally he had a blind spot for the dark disagreeable and unpleasant qualities of men and things. Through habit of mind this blind spot seemed to have enlarged still further. His birth and his judgment made him a strong pro-ally; nevertheless he was not blind to the good side of Germany and the Germans.

Perhaps Walter Dodd will be most pleasantly remembered in connection with our leisure hours. Whether on an excursion, at the various gatherings, at the dinner table, or in his tent he was almost foremost in honest fun and wholesome cheerfulness. Nature endowed him with an agreeable singing voice which one likes to think was made richer and sweeter by his own character. He was always active in getting the men together for an informal session of songs. We forgot his infirmities as he would have us forget them. Our recollections are not at all the recollections of a tragic figure who had experienced with a glorious fortitude years of suffering for the benefit of science and humanity, or who had endured with complacent calmness many mutilating operations. Our recollections are and will be those of a happy, cheerful, humorous soul who looked upon the world and its products with a kindly eye and generous, who saw good in everything and everybody. In his presence everything and everybody was good. We recall one who was full of the joy of living and who loved life.

Clinical Department.

THE MUCOSA OF THE RECTUM AND SIGMOID COLON AS A FOCUS OF INFECTION.*

By HORACE W. SOPER, M.D., St. Louis.

MANY reports are appearing in the literature relative to foci of infection in the respiratory tract and the genito-urinary system. Billings in his admirable work on focal infection refers briefly to pus infections occurring in the hemorrhoidal veins and the anal canal. I wish to direct special attention to infections of the mucosa of the rectal and sigmoidal regions, inasmuch as my experience reveals that such localized inflammatory processes are quite common, often escape recognition for years and are etiologic factors in the production of systemic disease. I do not include in this report abscesses and other conditions about the anal canal and hemorrhoidal veins requiring surgical aid. Luetic, tubercular and amoebic ulcerations are also excluded. The paper is, therefore, limited to a consideration of the primary infections of the mucosa of the rectum and sigmoid by pyogenic micro-organisms, the resulting systemic effects, the subjective symptomatology, and finally to the changes pro-

duced by direct local treatment. Fifty cases were studied, varying in intensity from mild non-ulcerative infections of the ampulla recti to severe ulcerative processes involving the entire rectum and a part of the sigmoid colon. Illustrative abstracts of case histories are here presented which may serve as examples of the various groups.

CASE 1. Male, aged 49; height, 5 ft. 11 in.; weight, 165 lbs; tuberculous family history. Chief complaints: rheumatic pains in joints and various muscles for the past two years. For five years has had irregular bowel actions, usually three or four small, inadequate passages daily. Has had dull headaches, lassitude, inability to concentrate. Eyes, ears, nose, throat, and teeth had been looked after by competent men without detecting a focal infection. Blood pressure, 152-90. Urine showed a trace of albumin, many cylindroids, indican. Wassermann negative. Feces: many small clumps of mucus mixed with pus cells.

Procto-sigmoidoscopy revealed a very tightly contracted rectum. The mucosa of the ampulla recti was deep red, thickened, and covered with thin feces, in which were many clumps of mucopurulent material. Culture showed the presence of many gram-negative bacilli, a few gram-positive bacilli, many staphylococci, no streptococci. No tubercle bacilli were found.

Treatment. Insufflation of calomel powder through the rectal tube. He improved rapidly and the feces became normal in four weeks' time. Rectum free from mucus and pus.

A month later he returned with a relapse, the mucosa showing the same sort of infection as before. The wrists and fingers were distinctly swollen. After two weeks' treatment he again improved, and is apparently in a normal condition at the present time, six months after treatment was instituted.

In this group are found the cases usually diagnosed as auto-intoxication and neurasthenia. However, sigmoidoscopy revealed that an infectious agent was responsible for the condition. Twenty cases, varying in age from twenty-one to forty-nine, were observed.

CASE 2. Female aged 43; height, 5 ft. 8 in.; weight, 123 lbs. Two children. Chief complaints: constipation as long as she can remember. For the past ten years has had rheumatic pains and swelling of the finger joints, backache, and especially severe headaches of migrainous type, occurring two or three times a month. Recently they were so severe that codeine and morphine were given hypodermically to control the attacks. Eyes, teeth, nose and throat had been carefully looked after by competent specialists. Had an operation for hemorrhoids two years ago. Her diet had been carefully regulated without any influence upon the headaches. Wassermann negative. Examination of urine and blood revealed nothing abnormal. Feces showed the presence of mucus, red blood cells, and pus cells. No culture made. Smear showed presence of diplococci and staphylococci. No gonococci. No tubercle bacilli.

The sigmoidoscopy disclosed the presence of a general catarrhal condition of the entire mucosa

* Read before the St. Louis Society of Internal Medicine, Jan. 17, 1917.

of the rectum, extending to the plicae sigmoidae. The membrane was much thickened and covered with small clumps of mucus and purulent material. The scar tissue from the hemorrhoidal operation caused considerable contraction of the anal canal.

Dilatations and daily treatment by calomel insufflations for six weeks, together with the use of oil enemata, finally produced normal, daily bowel movements, subsidence of the local inflammatory process and freedom from the attacks of headaches. No recurrence for the past twelve months.

The cases in which migrainous headaches and spastic constipation were the predominant symptoms were twelve in number. Eight showed the same striking improvement as the one described. In two cases the headaches recurred at longer intervals and were milder in type. In two the constipation was relieved but the headaches persisted.

CASE 3. Female, aged 35; height, 5 ft. 3 in.; weight, 110 lbs.; single. For ten years had trouble with bowels,—irregular, constipated, sometimes diarrhea after eating fruit. Severe diarrhea and cramps after taking purgatives. For the past four years has been an invalid. During this time had suffered four surgical operations: first, pus appendix; second, ovarian abscess; third, empyema of the gall-bladder; fourth, excision of gastric ulcer. Chief symptoms are almost constant occipital headaches, pains in joints (no swelling), pains in muscles, extreme nervousness, insomnia. Blood pressure, 100-80. The urine showed albumin and casts. Otherwise the kidney function was good.

Sigmoidoscopy showed a marked hemorrhagic pus proctitis limited to the ampulla recti. The entire membrane was much thickened and covered by a thick layer of bloody pus. No gonococci or tubercle bacilli were found. Culture showed bacilli coli, staphylococci and streptococci. It required six weeks' daily local treatment of calomel powder completely to clear up the infection and restore the mucosa to a normal condition. She has remained well for the past year, gaining 20 lbs. in weight and is able to resume her work as stenographer.

Ten of the case series belonged to this group. In some of them there was a probability that there had been an original infection by gonorrheal pus. However, the gonococci could not be isolated and the inference was that a general mixed infection had persisted. All showed sequelae such as appendicitis, cholecystitis, gastric and duodenal ulcer and kidney disease. A curious feature of this group is the tendency to hemorrhage. One case which was seen in consultation with Dr. Hugo Ehrenfest had several severe rectal hemorrhages.

CASE 4. Female, aged 64; height, 5 ft. 5 in.; weight, 112 lbs. Has suffered from arthritis deformans for twenty years. Joints of hands, wrists and shoulders affected. Has had many attacks of neuritis. The chief subjective symptoms were much intestinal gas, cramps, alternating constipation and diarrhea. Blood pressure, 180-100. Heart considerably hypertrophied; general sclerosis of arteries. Kidneys showed considerable impairment,

probably chronic interstitial nephritis. Feces showed small, bloody muco-purulent clumps.

The sigmoidoscope revealed an ulcerative proctosigmoiditis involving the entire rectum and two inches of the sigmoid. Purulent material was negative for tubercle bacilli and gonococci. Culture showed many gram-negative bacilli, many diplococci and streptococci.

It required two months' local treatment to restore the mucosa to a normal condition (insufflations of calomel three times weekly). The joints are less painful, but otherwise unchanged. She gained in weight and strength and the bowel function is good.

Seven cases were observed in which chronic interstitial nephritis and arthritis deformans were the predominant lesions. All showed much improvement in general nutrition and amelioration of the subjective symptoms with but little change in the joint conditions.

CASE 5. Female, aged 26; height, 5 ft.; weight, 95 lbs. Dates trouble from attack of typhoid fever ten years ago. Bowels much constipated. Defecation always painful, more so after laxatives. Has suffered from attacks of dyspepsia, nervous symptoms and loss of weight. Has often had low fever lasting for weeks. The examination of the urine showed a trace of albumin, hyaline casts, trace of sugar, strong indican and weak acetone reactions. Feces consisted of a small amount of fecal matter mixed with a mass of pus and blood. Wassermann negative.

Sigmoidoscopy. The entire mucosa of the rectum and the first three inches of the sigmoid is involved in a severe chronic ulcerative process. The wall of the bowel and mucosa is much thickened and covered by a thick, bloody pus. Culture showed a mixture of gram-negative and gram-positive bacilli, staphylococci and streptococci. No tubercle bacilli and no typhoid bacilli could be identified.

X-ray examination showed an absolute stasis in the transverse colon. The bismuth meal was retained here for one week. The x-ray diagnosis was, therefore, an obstruction, probably in the splenic flexure.

Treatment. Daily insufflations of calomel caused steady improvement, and in eight weeks' time the mucosa was in a normal condition. She gained 17 lbs. in weight, and all nervousness and headaches disappeared. Re-examination in October last showed no return of the infection and her health was fully restored. Bowel function normal. The colonic stasis was evidently due to a spasticity at the splenic flexure, and not to a true stenosis.

This case was unique inasmuch as it followed an attack of typhoid fever. She was probably not a carrier as no cases have occurred in her family.

The consideration of these cases raises an important question: is the inflammation limited to the rectum and sigmoid, or is the entire colon involved? In the cases here presented the return of the mucosa to a normal condition, a view of normal membrane higher than the diseased area and the absence of pus or mucus in the feces were taken as evidence that the lower colon alone was involved.

Cases of general colitis were encountered which were treated by other methods, notably autogenous vaccines. They are reserved, however, for a subsequent report.

In a considerable number of cases, not here reported, the incidence of pyorrhea alveolaris, pus proctitis and gastric or duodenal ulcer was noted. They were omitted in this paper as it was difficult to determine which was the primary lesion.

SUMMARY

First: The lower colon is frequently invaded by pus-forming organisms. The infection is mixed in character and exhibits an extreme degree of chronicity. The resulting systemic disease varies from merely nervous disturbances, headaches, and constipation to pus infection of the appendix and gall-bladder, gastric ulcer, arthritis deformans, and chronic kidney disease.

Second: Treatment by dry powder insufflation method of Rosenberg is extremely efficacious. Calomel is the powder of choice for local use as it adheres well to the mucosa and cannot be easily dislodged. It is non-irritant and may be applied to the sensitive mucosa of the anal canal without producing pain. There is no danger from absorption. Not a single case of systemic disturbance followed the daily use of large quantities. Finally, calomel has probably more antiseptic power than any other available powder.

Third: In the search for foci of infection, the lower bowel must not be neglected. *In fact no general examination of a patient is complete without procto-sigmoidoscopy.*

A CASE OF MELANOTIC SARCOMA ARISING IN THE EYE, WITH METASTASES; AUTOPSY FINDINGS.

By LESTER ADAMS, M.D., BANGOR, ME.,

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THE patient was a white woman, aged 30, admitted to the medical service of Dr. Bertram L. Bryant on March 6, 1916, complaining of pain in the right lower thorax.

Family History. Unimportant. One sister has been treated for "nervous trouble" at the Bangor State Hospital (for insane).

Personal History. Health has been good, with the exception of "acute rheumatism" five years ago, from which she made a good recovery. Patient does not remember about the diseases of childhood. She has borne three apparently healthy children and has had no miscarriages.

Four years ago (1912) patient had what her physician told her was a "hemorrhage into the retina." There was slight pain and indefinite disturbance of vision in right eye, coming on suddenly during labor. The trouble with the eye continued, and about one year after onset she consulted an oculist. Dr. H. T. Clough saw her at this time, and has kindly given a description of the condition as he saw it. There was an irido-cyclitis,

complete blindness, increased tension, and the fundus could not be seen. At the end of two years after the onset of symptoms, and after continued anti-syphilitic treatment had given no relief, the eye was removed. This was in 1914, about two years before the patient appeared at the hospital. During these two years the patient was well except for attacks of "sciatica."

Present Illness. One month before admission (about Feb. 1, 1916) there has been a persistent pain in right lower thorax, under the breast, becoming increasingly troublesome. There has been also loss of appetite without apparent emaciation, and patient has become very "nervous and depressed," feeling that death was imminent.

Physical Examination. Patient is a woman of short stature and very obese. The mentality is of a low grade, but memory seems clear. She is greatly worried over her condition. The breasts and abdominal wall contain a great amount of fat. The limbs show proportionately more in the proximal parts. There are no painful nodules. The skin is smooth, good color, and shows no abnormal pigmentation or moles.

Eyes: There is an artificial eye on right. Vision of left eye is good. Pupil reacts normally.

Ears, nose, mouth and throat show nothing remarkable.

The neck is very short. There are no palpable glands.

Chest examination is unsatisfactory because of the thick layer of fat. Breath sounds are distant. Over the lower half of right lung are heard a few fine moist râles, increased on deep breathing. There is no friction rub or tubular breathing. Over the left side the breath sounds seem clear.

Heart: There is no apparent enlargement. No murmurs are heard. The pulse is regular in force and rhythm, fair volume, 80 to the minute. Blood pressure: systolic 130, diastolic 80.

Abdomen: Examination is very difficult because of the excessive fat. Pressure over the lower ribs in front and in axilla on right causes pain. There is an indefinite resistance just below the costal border in front, suggesting the edge of the liver.

Glands: In both groins are felt glands .5 to 1 cm. in diameter. Cervical, axillary and epitrochlear glands are not felt.

Vaginal examination shows a lacerated cervix and perineum.

White blood count, 11,000.

Differential count with Wright's stain shows 73% of polymorphonuclear neutrophils, and 13% of small lymphocytes. In fresh and stained smears the red cells appear normal.

Wassermann test negative.

The urine showed on several examinations a specific gravity between 10.20 and 10.30. The color was yellow, and did not change on standing 24 hours. There was no albumen and no sugar. One examination, two days before death, showed cystin crystals. One phenolsulphonephthalein test showed an excretion of 63% in two hours.

X-ray examination of the chest showed diffuse opacity in both lungs. Bismuth plates of the abdomen showed nothing remarkable.

Temperature and pulse were normal on admission, becoming elevated during the last few days, when there were diffuse râles in both lower lungs. The terminal signs were those of broncho-pneumonia.

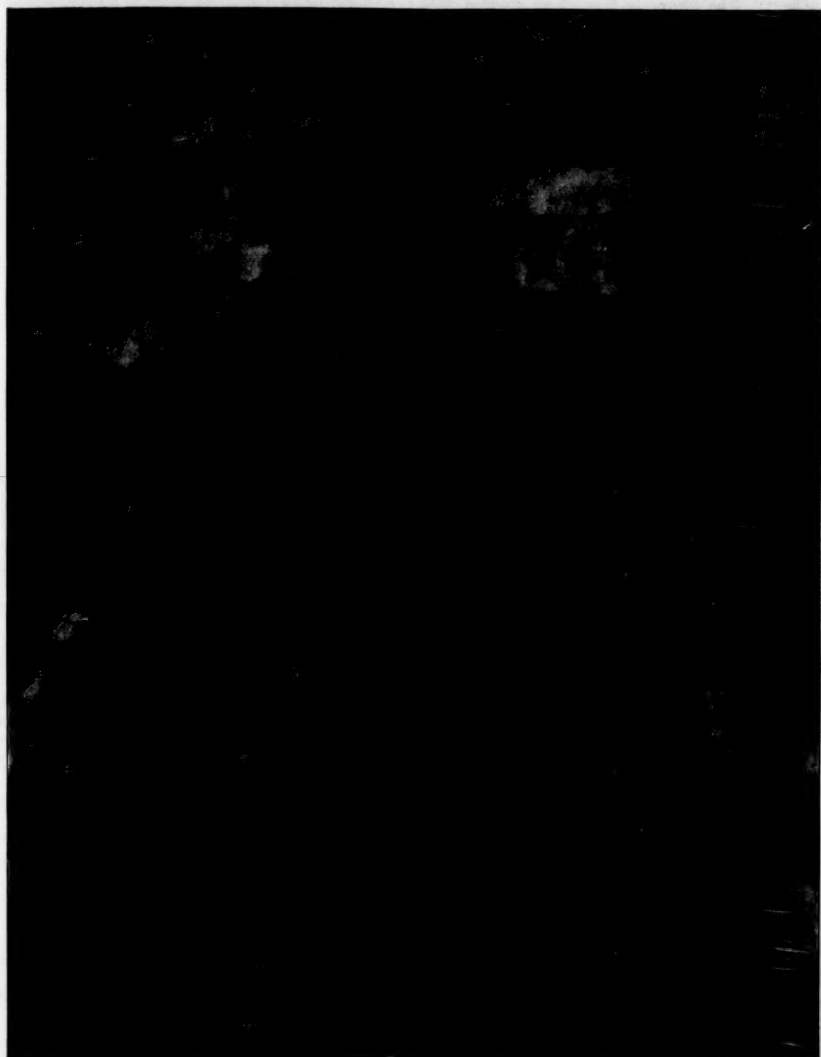


FIG. 1. Roentgenogram showing opacities in *larga*.

Autopsy. Description of body: Rigor mortis is present and there is lividity of back. The skin shows no ulceration or mole in any part, no abnormal pigmentation. There is a glass eye on right. The tissues of orbit show no evidence of tumor. The left conjunctiva is clear, the pupil moderately dilated.

The panniculus measures 7 cm. The peritoneal

surfaces are smooth and glistening except on the lower margin of the liver, where there are seen several nodules, circular in outline, 1 to 3 cm. in diameter, slightly elevated, and each one showing a central umbilication. They are of a slate gray color, and are covered by the capsule of the liver. The liver edge extends 4 cm. below the costal margin. Nowhere else in the abdomen are any similar nodules.

Chest: The pleura is everywhere studded with nodules similar to those seen in the liver, except that they are black and show no umbilication. On the parietal pleura are seen black masses 1 to 6 cm. in diameter, attached only by very fine pedicles, and these can be removed in large clusters. Similar growths are found at the hilus of each lung. The two sides of the chest present similar appearances. There is no free fluid in the chest. At the right apex and at the right base there are a few fine delicate adhesions.

Heart: The pericardium is not involved in the tumor growth. The pericardium contains about 15 cc. of clear fluid. The heart is not hypertrophied or dilated, and the valves appear normal.

Lungs. The lungs are rather voluminous and very heavy. Section shows the black tumor nodules scattered throughout the substance of the lung, preserving everywhere a distinct outline.

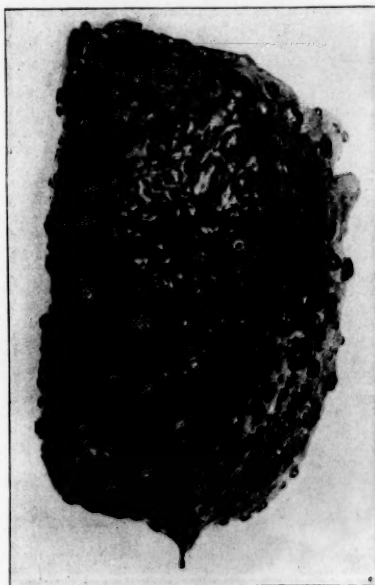


FIG. 2. Photograph of left lung showing black tumor nodules.

Liver: The liver is moderately enlarged, extending about 1 cm. below the costal margin, and presents on all surfaces the umbilicated nodules described above. Section shows these nodules in the substance but more numerous near the surface, and more widely separated than in the lung.

The spleen, kidneys, adrenals, stomach and duodenum, pancreas and intestine show no involvement by the tumor growth, and present nothing worthy of note.

The ovaries show no tumor growth; they are small and atrophic. There is no tumor about the external genitalia.

Brain: The surfaces are smooth and glistening. The optic nerves followed into orbits show no tumor

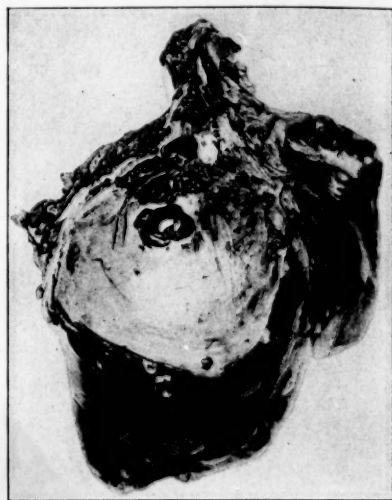


FIG. 3. Photograph of liver showing umbilicated nodules and position of diaphragm showing nodules on pleural surface.

growth. The hypophysis is normal in size and appearance.

Microscopic sections of the tumor masses from lungs and liver show a melanotic sarcoma.

We have, then, a melanotic sarcoma, involving the lungs and liver. In the past history there was irido-cyclitis with secondary glaucoma, necessitating removal of the eye. Although there was no tumor mass noted in the eye at the time of removal, it seems certain that the primary growth was in this eye. The autopsy has eliminated other possible points of origin, such as the pia arachnoid, the skin and ovaries.

This case is similar to, and almost identical with, a few cases recorded. The lungs and liver are the favorite seats of metastases.

Alter¹ mentions the four arbitrary stages of the disease:

"1. Tumor usually seen with the ophthalmoscope, where there is a visual defect corresponding to the tumor.

"2. Complete blindness, tension increased. (Diagnosis difficult.)

"3. Extension outside, either anteriorly or posteriorly along preformed spaces. When tumor extends posteriorly exophthalmos develops. After perforation the pain ceases.

"4. General metastases, most often involving the liver, less often the lungs and skin. There may be extension to the brain and spinal cavity."

He says, "In rare instances there are symptoms of severe irido-cyclitis; the eye becomes softer so far as tumor contained in it permits."

Most reports show a gradual loss of sight, but rarely a sudden loss, as in this case, it being accounted for by the fact that the slight defect in vision is not noticed, but that sudden detachment of the retina produced by the tumor growth causes complete blindness. Lediard² mentions a case in which the onset was similar in its suddenness to this one.

Concerning the frequency of the disease, Keipe³ quotes the classical report of Fuchs, which shows in 137,545 eye patients 97 sarcomas of the uveal tract, or .07%.

The diagnosis is difficult because of the infrequency of the disease. In this particular case the diagnosis was difficult in the early stage, because of the similarity to syphilitic disease of the eye. When the patient came to the hospital the history of the eye condition was misleading. The diagnosis was further made difficult by the extreme adiposity of the patient. In a thinner person the x-ray plates of the chest would have been better evidence, and the nodules in the liver might have been palpated. The pain in the right side seems readily accounted for by the dense tumor masses involving the right pleura.

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SYSTEMIC OIDIOMYCOSIS: WITH MANIFESTATIONS IN CENTRAL NERVOUS SYSTEM.*

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AND

SAMUEL STARR, M.D., PROVIDENCE, R. I.

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In a recent monograph of the Rockefeller Institute for Medical Research, Stoddard and Cutler¹ reviewed the literature and offered the relationship existing between coccidioid granuloma, blastomycosis (oidiomycosis) and torula infection in man. It has been a topic of much discussion in times past as to whether blastomycosis was a name applied to a group of various organisms, or was a classification for a distinct clinical entity. In 1912 Rusk and Farnell² described two cases with autopsy reports in which spherical, or oval budding, doubly contoured organisms were found throughout body viscera and brain; these organisms were classified under the genus of *Oidium*. One patient died from exhaustion in a senile confusional state and the other from a systemic infection (considered pulmonary tuberculosis) and what was recognized clinically as dementia paralytica. Stain sections from the viscera and brain, how-

ever, from both cases ruled out senile dementia in the one and dementia paralytica in the other, and demonstrated that both cases died from systemic oidiomycosis. Recently, Stober³ of Chicago, Brown and Commings⁴ of San Francisco and Wolbach⁵ of Boston have summarized the clinical pathology and therapeutic diagnoses of two of the three conditions,—coccidioid granuloma and oidiomycosis,—whereas Stoddard and Cutler have summarized the torula infection in man. All these parasitic diseases as they occur in man, bear a close resemblance to tuberculosis, and it is because of this fact that the report of this case has appeared noteworthy.

The case, a man, was a patient of Dr. Arthur J. B. Falcom of Pawtucket, Rhode Island, who has furnished us with a greater part of the history.

T. R., male; married; age 57; carpenter by trade. There is nothing of note in the family history for two generations past.

Personal History. He was born in Canada in 1859, the sixth in a family of eight. His infancy and early childhood were uneventful. He attended school until he was sixteen years of age, after which time and until the age of thirty, he either worked as a store-keeper or a farm hand. At thirty he came to Pawtucket, where he has followed the trade of a carpenter. He married at twenty-five years of age, a healthy, French-Canadian, who has given birth to five children—one boy and four girls. One girl died at five months of cholera infantum. The youngest living girl has a healed mid-dorsal tubercular spine with deformity. The remaining members of the family are quite well.

The patient has never used tobacco in any form. He drinks very infrequently of gin. He denies both gonorrhea and syphilis. Until the present illness he has had no medical attention of note.

Present Condition. In April, 1914, the thumb on his right hand developed a "felon". This mass was incised with the discharge of considerable pus. The attending physician curetted the terminal phalanx at a later date because of the continued discharge of pus and the fact that the wound did not heal. At the end of six months and after several curettings, drainage and the use of the violet rays, the lesion healed. In the following February (1915) he complained of severe pain in the back opposite the right shoulder, which continued for four weeks before the development of signs of inflammation, tenderness, redness and swelling. At this time one of us, (S), saw the patient and suggested an examination of the blood for a Wassermann reaction. The report of the reaction was negative. Notwithstanding the negative report, however, salvarsan was given him intravenously. Following the introduction of antisyphilitic treatment, the patient became very much worse physically. He developed a hacking cough with profuse expectoration; loss of weight and strength was excessive, and it was necessary for him to take to his bed in an advanced degree of exhaustion and suffering severe pain in the right side, encircling the chest and abdomen and extending down the right leg, with a greater loss of strength in the right leg muscles. His temperature was 100, pulse 90 and respiration 36. At this period he was seen by Dr. F.

* Clinical Presentation before Boston Society of Psychiatry and Neurology, Dec. 21, 1916.



FIG. 1. Healed lesions on leg of a patient, copper colored, puckered edges and a rough surface.

Physical Examination. A tall, pale, emaciated man of 57, coughing almost continuously. Chest examination revealed areas of activity which were called tubercular. (No tubercle bacilli found in the sputum.) On account of great subjective pain, he lay usually on his left side. His pupils were dilated, but reacted promptly to light and accommodation. There were no cranial nerves affected. His breathing was shallow and labored. His heart was negative. Blood pressure, 140. He complained of cramps or spasm in his right leg, with sharp, shooting pains. His knee-jerks were exaggerated, the right greater than the left. The Achilles jerks were unequal, the right greater than the left. There was a right ankle clonus and a dorsal extension of the big toe on the right foot. The sense of position was not disturbed. Aside from tenderness of the peripheral nerves and a general hypersensitiveness of the whole right side, there were no sensory signs. On his left shin-bone there was a swelling, somewhat tender but not fluctuating. An x-ray* of his chest and upper spine showed foci of apparent tubercular processes and an absorption of bone in the upper dorsal region of the spine, with acute angulation of the 3d and 4th dorsal vertebrae. Von Pirquet's skin tuberculin reaction was negative. Noguchi luetin reaction was also negative. Thus far, notwithstanding the mixture of signs, the symptom-complex suggested pulmonary tuberculosis with possible meningitic complications and the man also suffering from syphilis.

An examination of the spinal fluid revealed 18 lymphocytes per c.mm. The amount of globulin and albumen was also increased in the fluid. The



FIG. 2. "Moth-eaten" terminal phalanx, the primary lesion.

* We wish to express our thanks to Dr. I Gerber for the publication of his x-ray pictures.

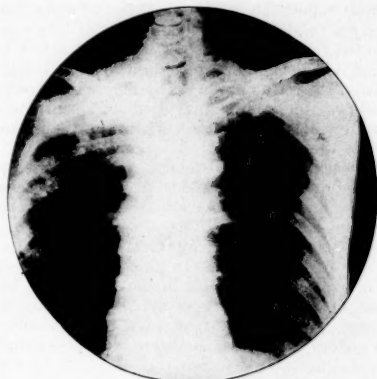


FIG. 3. X-ray of chest showing foci of infiltration and areas of calcified processes not unlike pulmonary tuberculosis.

Wassermann reaction was negative, and the colloidal gold reaction showed no precipitation. The cellular differentiation, however, showed some densely stained cells quite unlike lymphocytes, which upon decolorization proved to be the oidium, or blastomyces.

A probable clinico-pathological diagnosis of blastomycosis having been made, the patient was given potassium iodide in large increasing doses, 80 to 300 drops of a saturated solution a day. Within seven days he began to improve. Stoddard and Cutler say: "Coccidioidal granuloma, not helped by iodides; torula infection, not helped by

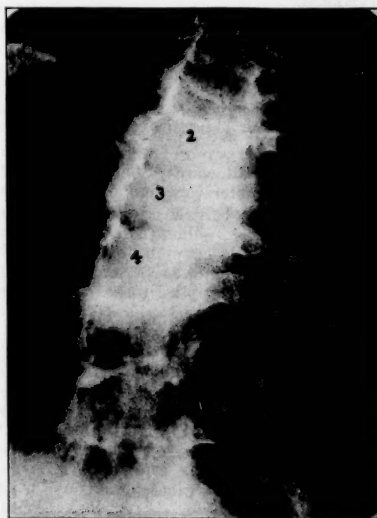


FIG. 4. X-ray of upper dorsal spine showing an acute angulation of second and third dorsal vertebrae and an increased density of the bony parts.

salvarsan, no data as to the effect of iodides; oidio-mycosis, usually helped by iodides." During the last six months the patient has improved in general health. His cough and expectoration have subsided. He has no signs of spinal cord or meningeal disorder. He has gained considerable weight and strength, and has worked for a short while this summer. Five weeks ago, after a period without iodides, a suppurating lesion appeared in the right lower chest. The pus was aspirated, and both cultures and animal inoculation made. The cultures contained the oidium and the streptococcus viridans. The animal (a guinea pig) was killed after four weeks, but showed no evidence of the mould in the peritoneal cavity.

The mechanism of invasion of the disease process in this patient is problematical. He is a Frenchman of comfortable means, living in a good hygienic environment. He has never been injured or suffered from any infectious disease. The question of working on old buildings or building new structures out of old lumber may be a possibility, but hardly a probability. This organism has as its habitat, often rotten, decayed wood. Stober has cultivated the mold on loaves of bread, pieces of wood and moldy leather. The general opinion is that the infection enters the body by way of the respiratory tract. This, therefore, causes considerable confusion, clinically, in differentiating the disorder from tuberculosis. Its dissemination is probably by the lymph-stream, and thus such points of election as periosteal nodes, the liver, brain and meninges, cause it to resemble syphilis.

Notwithstanding the apparent confusion in differentiation between this disease process and tuberculosis or syphilis, it is absolutely essential to exclude coccidioidal granuloma, torula and yeast infections by the demonstration of the budding oidium and the general improvement under iodide treatment.

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COMPARATIVE STATISTICS ON PHYSICAL EXAMINATIONS OF PUPILS OF THE BOSTON PUBLIC SCHOOLS FROM DECEMBER 1, 1915, TO APRIL 1, 1917.

BY WILLIAM H. DEVINE, M.D., BOSTON,

Director of Medical Inspection.

	1915-16	1916-17
Total number of pupils examined . . .	99,862	104,287
Total number without defects . . .	30,781	38,318
Total number with defects	69,081	65,969

DEFECTS AS FOLLOWS

Defective nasal breathing		
Anterior	1,292	1,297
Posterior	5,966	5,282
Hypertrophied tonsils	18,444	14,806
Defective palate	351	169
Cervical glands	18,841	7,746
Pulmonary disease		
Tuberculous	44	22
Question		1
Non-tuberculous	683	453
Cardiac disease		
Organic	1,330	1,406
Functional	1,968	1,716
Nervous disease		
Organic	74	48
Functional	221	179
Chorea	43	23
Orthopedic defects		
Tuberculous	88	76
Non-tuberculous	1,698	1,770
Skin	3,071	2,978
Rickets	383	326
Malnutrition	2,110	1,712
Mental deficiency	431	448
TOTALS	56,738	40,458
* Defective teeth		
Defective primary	32,997	
Defective primary (Oct., Nov., Dec.)		22,745
Defective secondary	23,753	
Defective secondary (Oct., Nov., Dec.)		17,493
Defective (classed without regard to primary or secondary from Jan. 1, 1917)		15,400
TOTALS	56,750	55,638
GRAND TOTALS	113,448	96,096

Last year a "Report on Physical Examinations of the Pupils of the Boston Public Schools" was published in the BOSTON MEDICAL AND SURGICAL JOURNAL,[†] and now comparative statistics for the last two years may be interesting.

It is evident that comparative statistics to be of real worth should be deduced from similar conditions. It is hoped that each succeeding year will prove the value of medical inspection as a prime factor in prophylactic medicine.

The opening of schools was postponed this year until October 1, owing to the epidemic of acute anterior poliomyelitis. This necessitated a delay in the completion of the physical examinations.

This year's report shows a decided gain in the number of children without defects.

The number with defects was 69,081 in 1915, and at the same rate the defects this year would be over 73,000.

Defective anterior nasal breathing is about the same as last year, but there is a decided falling off on the posterior. A marked diminution is

* During the year 1915-16, and from October 1, 1916, to January 1, 1917, defective teeth were classed as primary and secondary. In some instances, if a pupil had defective primary and defective secondary teeth, it was recorded as two defects instead of one. In order to avoid duplication of defects, it was thought advisable to record defective teeth as one defect without regard to whether they were primary or secondary. This method was adopted commencing January 1, 1917, and precludes comparison for the two years.
[†] May 25, 1916, (Vol. cxxiv) page 774.

also noted in hypertrophied tonsils. This improvement in nose and throat conditions can be accounted for, to some extent, by the throat and nose operations performed last year on recommendation of the school physicians.

The decrease in cervical glands is partly due to the fact that this year school physicians have been instructed not to report slightly palpable glands when secondary to adenoids, tonsils, carious teeth, pediculosis, or some allied condition. These cases are kept under observation, and only the primary causes reported.

In 99,862 pupils examined last year, forty-four cases of pulmonary tuberculosis were found. In 104,287 physical examinations for the present school year, there were only twenty-two cases reported. This is certainly a remarkable showing, and it is hoped that future reports will continue to note a marked diminution.

In commenting on the report of last year, the editor of the JOURNAL stated, referring to cardiac diseases, "After all, the majority of children with organic lesions will always be handicapped, and all the medical care in the world cannot bring them up to the average physical standard." A comparison of the tables of last year and this year would seem to indicate that this observation was well founded.

The decrease in nervous diseases, organic and functional, including chorea, is encouraging.

The various activities of the School Department that have for their object the prevention of dental disease are too broad to discuss in this article. This year the medical department has paid special attention to the kindergarten and lower grades and has devoted much energy to securing the coöperation of the various dispensaries. Encouraging results are expected from this work in the near future.

THE USE OF RADIUM IN THE TREATMENT OF CUTANEOUS EPITHELIOMA AND KERATOSIS SENILIS.

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AND

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WHATEVER discrepancies of opinion which exist at the present time with respect to the value of radium in systemic malignant neoplasms, there seems to be unanimity of opinion regarding its efficacy in the treatment of epithelial tumors of the skin, and to which should be properly appended keratosis senilis as a precancerous lesion.

Since the early work of Wickham and DeGraix in France, and Abbe and Simpson in this country, evidence in favor of radium treat-

ment for skin cancer is cumulative. While it should never be the brief of the physician to avoid surgery, except when other methods warrant it, yet it should be granted that if surgery can be avoided in a given affection and equally good results obtained, there are distinct advantages in favor of such procedure.

The efficacy of x-ray, for example, has long been conceded, as statistics tend to prove. But here one is confronted with increasingly complicated apparatus and corresponding delicacy of technic. Accurate dosage in x-ray therapy has always been difficult to obtain and even today, with the more perfected tubes and direct methods of gauging dosage, the margin of safety is still rather narrow and demands an operator of the utmost skill.

It is not our purpose to eulogize radium in too optimistic terms, and in general we are interested mainly in the cure of our patients by any means whatsoever. Our experience in the use of radium during the past two years, however, prompts a cordial appreciation of its ability to heal skin cancers; while its uniformity of potential, allowing accuracy of dosage, together with a fairly broad margin of safety, renders it a remedy especially adaptable to lesions of this nature. Healing is obtained with slight inconvenience to the patient; no discomfort of any moment and with cosmetic results unobtainable by any other means.

The following case reports, taken from private practices of the writers, are illustrative of types amenable to radium treatment. The results were obtained by one-half and one-quarter strength applicators, collectively containing eight milligrams of radium element.

CASE 1. Mr. F. B. N., aged 47. Quarter-sized epithelioma of one year's duration on the right cheek.

Radium in a half strength applicator was applied for seven hours, divided in seven treatments



FIG. 1.



FIG. 2.

of an hour each at weekly intervals. Twelve weeks after the first application the lesion was completely healed. There was no sign of a recurrence after four months.

CASE 2. Mr. A. M. C., aged 42. Dime-sized, superficial epithelioma on the concha of the left ear, of nine months' duration. A slight exposure for three hours of unscreened, half strength radium applicator was sufficient to eradicate the lesion. Complete healing took place in one month.

CASE 3. Mr. S. K., aged 65. Recurrent epithelial growth, 1 by 2 cm., at the periphery of a scar of an old growth curetted some years before from the right cheek. The lesion completely healed in two months' time, after two treatments for an hour each, at four weeks' interval, with a half strength radium applicator.

CASE 4. Dr. X., aged 60. A small ulcerated epithelioma, $\frac{3}{4}$ cm. in diameter, situated on the left ala nasi. The borders of the lesion were firmly indurated. The affection was first noticed four or five years ago as a small keratosis. It remained practically stationary until three months ago, when it began to enlarge and become a nodule.

Radium was applied to this patient for an hour and a half, divided into two applications of three-quarters of an hour each, at weekly intervals. Quarter strength applicators were used. Complete healing ensued; the scar was slight and plastic, and there has been no recurrence after an interval of seven months.

CASE 5. Mr. G. A., aged 70. Recurrent epithelioma in cicatrix following excision and treatment by x-ray. The affection began five years ago over the left mastoid region and became an ulcerated nodule 2 by 3 cm. in diameter. Two years ago the lesion was excised but it recurred in three months.

A total time of six hours' application of radium was made to this lesion, divided into three exposures. Quarter strength applicators were used with a screen of .5 of aluminum. Healing was complete in two months. The cicatrix is still sound with no evidence of relapse after seven months.

CASE 6. Mr. G. E., aged 79. Epithelioma over

right malar prominence, 3x3 cm. in diameter. The lesion was mainly ulcerative, but there was also a characteristic indurated periphery. There were also several small keratoses on various parts of the face which were also removed by radium. This epithelioma was given a total dosage of seven hours, unscreened, each exposure lasting from one to two hours. Some time was needed in this case to remove a deep nodule at the upper part of the lesion. The patient is still coming for treatment of a keratosis on one side of the neck. The scar at the site of the recent epithelioma is observed to be sound.

CASE 7. Miss R., aged 40. Two small nodules, $\frac{1}{4}$ cm. in diameter, near the muco-cutaneous border on the left lower lid. The affection had been noticed for about six months. The nodules disappeared following three hours' radium application. Light screening with aluminum foil and $\frac{1}{4}$ -strength applicators were used.

CASE 8. Mrs. P. M., aged 78. Epithelioma of left side of lobe of nose, recurrent in cicatrix. This lesion was treated by one of us with x-ray three years ago. There have been three recurrences during this period. After five hours' treatment with radium, complete healing ensued, and there is no evidence of return after a lapse of seven months.

CASE 9. Mr. J. E., aged 65. Extensive ulcerative epithelioma of the nose. The affected area is roughly quadrilateral in shape, the lateral diameter being two inches, the perpendicular diameter two and a half inches. The borders of this lesion are indurated and everted; the central portion is an ulcer.

To this epithelioma a total exposure of eighty hours was given, divided usually into two- and three-hour treatments. With the longer applications light lead screening was used.

After four months there remain but two palpable nodules. These are at present under treatment.

CASE 10. Mrs. P., aged 68. Nodular and ulcerative area on the left side of frontal region, approximately an inch in diameter. The patient's family physician had frequently cauterized the outbreak, but it had invariably relapsed in the scar. Here was complete healing after three hours of radium.

CASE 11. Mrs. J. V., aged 65. Small nodule, $\frac{1}{2}$ cm. in diameter, on the external surface of the left auricle. Complete healing occurred from four hours' exposure.

CASE 12. Miss L. R., aged 38. Epithelial nodule, occurring at the border of a pigmented nevus. Healed after three hours' exposure.

CASE 13. Mr. F., aged 55. Keratosis senilis. Several small keratoses on the external surfaces of both auricles. Each lesion was given one hour's exposure with $\frac{1}{4}$ strength applicators. Prompt healing followed.

CASE 14. Miss B. E., aged 35. Small epithelial nodule at the left inner canthus. Complete healing with three hours' exposure. Light aluminum screening was used.

CASE 15. Mr. A. J., aged 80. Epithelioma, nodular and ulcerative, on the left side of the forehead, one centimeter in diameter. Complete healing after four hours' exposure; $\frac{1}{4}$ strength applicators were used, without screening.

CASE 16. Mr. J. O., aged 58. Ulcerated nodule, $\frac{1}{2}$ cm. in diameter, on left lower lid. The patient also has numerous keratoses. The nodule and also several of the more prominent keratoses were healed with five hours' exposure.

CASE 17. Miss W., aged 54. Two small keratoses, one on either side of the nose. Each lesion healed after exposure of one-half hour, without screening.

CASE 18. Mrs. M., aged 56. Three small keratoses, one on the nose, the others on the left cheek. Complete healing after two exposures of one-half hour each.

CASE 19. Mr. L. P., aged 60. A business man presented a dime-sized, simple keratosis senilis upon the left malar eminence. Radium, in a half-strength applicator, was applied for twenty minutes, without screening. Reaction to the extent of reasoning and the formation of a dry crust appeared after seven days, and on subsiding about six days later, the skin appeared normal, and has remained so after a period of one year.

CASE 20. Mrs. R., aged 72. This lesion consisted of a rapidly-growing tumor, half an inch in diameter, with pearly borders and a central horn, three-eighths of an inch high, that had been present upon the upper lip for six months. Unscreened radium, in a half-strength applicator, was applied three times at weekly intervals for periods of forty-five minutes, one hour, and one hour and a quarter respectively. The projecting horn began to crumble away at once, and ten days after the last treatment considerable redness and crusting appeared as the result of the exposures. The applicator was screened with 2 mm. of brass and applied for thirty minutes. Two weeks later the reaction had entirely disappeared, leaving only a slight crust on a flat surface. Radium, with the same screening, was applied for forty-five minutes. The final scar was smooth and free from recurrence.

CASE 21. Mr. H. C., aged 70. The patient showed an epithelioma of several years' duration, upon the right side of his neck, at the collar line. The lesion was oval, an inch wide at its broadest point, and had a crusted ulcerative center and raised pearly borders. Six hours of unscreened radium, in hour exposures at weekly intervals, completely healed the lesion. Recurrence was guarded against by applying the radium with the 2 mm. brass screen for one hour every fortnight for four times.

CASE 22. Mr. R., aged 68. This patient had been troubled by a small, hard, keratotic growth in the outer fold of the right ear. Pain on pressure was so severe as to compel the patient to give up sleeping on the affected side. A single twenty-minute application of unscreened radium, in a half-strength applicator, was sufficient to relieve the pain after a few days. Two further twenty-minute treatments entirely removed the keratosis.

SUMMARY.

Radium effectively heals *epithelioma* and *keratosis senilis*. The cosmetic results following its use are excellent. An especial field of usefulness is about the nose and eyelids, where surgery is difficult and the results deforming. An advantage over x-ray therapy is the accuracy of dosage and the greater margin of safety.

Book Reviews.

A Text-Book of Fractures and Dislocations, With Special Reference To Their Pathology, Diagnosis and Treatment. By KELLOGG SPEED, S.B., M.D., F.A.C.S., Associate in Surgery, Northwestern University Medical School; Associate Surgeon Mercy Hospital; Attending Surgeon, Cook County and Provident Hospitals, Chicago, Ill. Illustrated with 656 Engravings. Philadelphia and New York: Lea & Febiger. 1916.

Dr. Speed's book is essentially a Chicago production, in spite of the fact that it is published by Lea & Febiger. The writer is associated with Chicago hospitals and a Chicago Medical School, and dedicates his volume to a Chicago surgeon who is well known throughout the United States. In his preface, Dr. Speed acknowledges the helpful co-operation of his colleagues in the hospitals with which he is connected and of members of the Chicago Surgical Society.

The book may, therefore, be taken as an index of the best surgical viewpoint in the great Middle West of the complicated subject of fractures and dislocations. It contains about 900 pages, with more than six hundred illustrations, a very large number of which are line drawings reproduced from tracing of Roentgenograms of an actual case. The illustrations, as a whole, are most satisfactory: anatomical plates are almost all taken from Gray, and the many line drawings of fractures are sharp and clear and show unmistakably and definitely the lesion which each picture is intended to illustrate.

It is a little difficult to speak concisely of the text. The book seems to be a miniature encyclopedia not only of the observer's own cases, but also of the literature. The reviewer feels the absence in many places of a definite statement of the writer's own convictions upon subjects which are at present under discussion. In other words, the author frequently tells what other men do in given conditions, but not always what he does, or what he advises the reader to do. It is a trifle disconcerting to find Whitman's method of treating fractures of the femoral neck dismissed with a few lines; we may again sympathize with Whitman who in a recent article remarked that he had yet to see in medical literature his own method described in his own words.

The book might be described as a consideration of the present knowledge and treatment of fractures, and as such may be recommended rather to practitioners than to undergraduates. The author has evidently spent much time and care upon the subject; has been systematic and thorough in following and codifying the literature; and the results of such conscientious compilations should always be both interesting and helpful to the busy physician.

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THE MALARIAL ENDEMIC INDEX.

TOGETHER with hookworm infection, the wide prevalence of malaria in the Southern States is, perhaps, the largest factor in retarding the development of those sections. They are the causes of so much of the actual incidence of illness and of disability that the health surveys undertaken from time to time have proved of great value in the determination of causes at the bottom of this state of affairs. While present in the Northern States, malaria does not present so acute a problem. Yet there is little doubt that intensive investigations, somewhat on the scale carried out in the Southern communities, would reveal a much greater prevalence than is now realized. Wherever there are maintained breeding places for the anopheles, whether in the North or in the South, there will malaria flourish. Of course, the country is the place of election because of the greater opportunity for the presence of stagnant water or

marshy land. Clearing away brush, draining pools, ditching marshy land, by depriving the anopheles of breeding places, will of itself eradicate malarial infection. Malarial conditions are simulated in the cities by the stagnant street pool, defective house drains, uncovered water tanks and the like. Yellow fever was eradicated from urban communities by destroying these breeding places for the stegomyia.

In some of the Southern communities as many as 75% of the workers would be incapacitated from malaria. The early seasonal increase of malaria could not, however, be ascribed to the anopheles directly, but rather to the large carrier population, not themselves actively suffering from malaria, but furnishing the mosquito with the infective material. The carriers are the factors that keep the malaria alive in a community, from season to season; and the incidence of malaria in a community must bear a direct relationship to the size of the carrier population. For this reason it is most desirable to determine what percentage of a community having evidence of malarial infection perhaps acted as carriers. Von Etdzorf (Public Health Reports, No. 331) undertook to determine the endemic index of a community, that is, the percentage of the inhabitants of a community having evidence of malarial infection without manifesting the disease. In his survey of certain communities he found that index to be 13.50. The malarial index must not be confounded with the malarial rate, which refers to the percentage of inhabitants actually suffering with malaria at any time. This he found to be about 5. Both of these classes, the active and the latent—the index and the rate—are active factors in keeping alive and in spreading the infection. On the other hand, only about 1 out of every 4 who harbor the plasmodium harbor the sexual form (gametocyte), necessary to infect malarial-bearing anophelids, who are therefore, at all times potential malaria carriers.

The endemic index is determined by palpation of the spleen, by the parasite method, and, of course, by combined methods. The spleen as an indicator of malarial infection is inaccurate. It is usually palpable in young children, and is present in many other conditions. This method, nevertheless, serves as a broad guide when a great number of individuals are to be included in a survey. The blood or parasite method should be the method of choice whenever pos-

sible. Thick blood smears are better than thin ones because it is estimated that about 25% of the thick smears are not confirmed in thin smears. Moreover, the index ascertained by the blood method is in inverse proportion to that found by the spleen method. That is, where the spleen is found enlarged, the plasmodia are hidden within it and are not found in the blood stream; and, conversely, when still in the blood stream they have not yet found their way into the spleen. It is for this reason that the chronic malarial cachexiae are so hard to treat.

The most accurate index can be determined only after examining all ages. The index of children is best determined by examining them between the ages of 10 and 15. At this time the high mortality of children from other causes will have expended itself and cannot affect statistical considerations here. Yet the highest figure in children is found between the ages of 1 and 3, and lowest between 10 and 15. The tertian type of plasmodium was found twice as frequently as the aestivo-autumnal.

With a high endemic index, that is, a large carrier population, maintained at a high figure by conditions favoring mosquito breeding, the malarial rate, the actual fever cases, must continue to be high and will resist reduction. It can be nothing less than a reflection upon the communal pride of a citizenry that tolerates such conditions.



A METHOD OF ANESTHESIA FOR SOLDIERS.

ONE of the chief reasons why anesthesia cannot be taught to a layman as simply as any complicated mechanical procedure is that it is not mechanical. The actual preparation of the patient, the way to administer ether by the open and closed method, all the mechanical details—can be taught to anyone of sufficient intelligence to grasp the number of details involved, and retain them. Among all the known quantities of the anesthesia formula, however, there is one unknown quantity, x — the patient. And there are a hundred and one variations in the routine, depending on the patient himself.

In the usual urban, general hospital there are many types of patient, but when we come to a military hospital another condition prevails. The foreign medical journals have been laying stress on certain characteristics of the average

soldier, which must be given due weight in dealing with him. As we have no reason to believe that the American soldier will differ very greatly from his trans-Atlantic cousin, it would be well to note in advance a few of the points.

It is generally agreed that the soldier is a pretty healthy specimen. Before he can enter the Army he passes a rigid physical examination. While in the Army he lives mostly an outdoor life, with regular habits and plenty of exercise. As a result English writers agree that soldiers more nearly approach the normal healthy human being than does any other class of patient.

When we come to give anesthesia to a large number of soldiers, as will be the case in the event of any actual fighting, we must remember, first of all, that we are dealing with a normal, healthy adult. Second, most soldiers have a cough and an irritable throat, at least, such has been the case among the soldiers returned to the English military hospitals. The former condition is due to exposure to wet and cold, and the latter to the constant use of tobacco. Bearing these facts in mind, Dr. W. J. McCardie has been working on the standardization of the anesthesia of soldiers. He published his results in the *British Medical Journal* for April 21.

Ether alone he found too irritating to the throat and lungs; chloroform alone was too depressing. He had observed that the addition of a small quantity of chloroform to the ether seemed to combine the advantages of both, so he experimented with various mixtures, chiefly $E_4 C_1$, $E_7 C_1$, $E_{10} C_1$, $E_{15} C_1$, $E_{20} C_1$, and $E_{25} C_1$. In the first two mixtures the chloroform element was too great for safety, while in the last one it was practically negligible. Finally he decided upon $E_{10} C_1$ as the ideal combination, and this he has used in 732 cases out of 843 anesthetized during the year. He has given the name of "mitigated ether" to it. All patients were given one-sixth of a grain of morphine and one one-hundredth of atropine before operation.

Dr. McCardie came to the following conclusions: First, the irritation caused by ether vapor is mitigated by the addition of a small quantity of chloroform; preferably one part to sixteen, except in the case of debilitated patients, when the proportion should be 18 or 20 to 1. Second, this mixture is practically as safe as ether alone. Third, it is rapid. Fourth, it is less irritating than ether.

Here again the experience obtained at such a cost by one of the warring nations can be utilized by us at will. Of course many expert anesthetists will give their service to the country or be developed by the war, and these will have their favorite methods, which in their hands will undoubtedly give excellent results. But there will also be many cases where anesthetics will have to be given by those unfamiliar with them, and a tested method of this sort should be invaluable.

PELLAGRA AS AN ECONOMIC BAROMETER.

SUNDWALL* has lately shown that the tissue alterations in pellagra are the same as those resulting from malnutrition, that the disease is not due to a microorganism, but is a dietary disease along with rickets, scurvy, and beri-beri. This is an interesting and valuable point in dealing with this disease. It brings the treatment of it down to a comparatively simple proposition,—prevention by a balanced diet. Bearing this in mind, it is easier to understand the depression of the pellagra curve last year. We all know that there was a considerable diminution in the disease, but varying explanations were given for it. Thus some observers thought that it might have been a germ-borne disease, continually propagated by the influx of aliens, and explained its 1916 decrease by the more stringent rules against immigration and the decrease of ocean travel. The real reason seems to have been the improved economic condition of the United States, due to the war. Last year employment became plentiful, wages high and the per capita wealth of the country increased. To be sure, there was also an increase in the cost of food products, but not a proportionate one. Thus the class which develops pellagra found itself able to afford a better and broader diet, and the disease immediately decreased.

Accepting this view, we must be on our guard against an increase this year. The rise in the cost of forage has caused many a person who kept one or two cows to sell them, and families have thus been deprived of milk, one of the best pellagra prophylactics. The cost of food continues to soar, especially meat and eggs and leguminous foods in general. This will mean

a restricted diet for many families, and inevitably an increase in pellagra.

So we see that this disease acts as an economic barometer. A decrease in its prevalence means an improvement in the economic condition of the laboring classes and a consequent improvement in their diet. An increase means the reverse. The entrance of the United States into the war, too, will undoubtedly facilitate the anticipated 1917 rise in the pellagra curve.

JOINT VOLUNTARY COMMITTEE ON MEDICAL PERSONNEL FOR MASSACHUSETTS.

THE Committee is sorry to announce that less than 3500 cards have been returned from the doctors of Massachusetts, to whom approximately 5800 cards have been sent. This registration is, unfortunately, low and seriously limits the value of the card catalogue. It is obvious that if 10,000 doctors are needed in the near future, complete catalogues of the doctors in each state must be available. It is, therefore, urged most strongly that every physician who has a card in his possession will fill it out immediately and post it in the enclosed addressed envelope. It is a matter of very great importance. It is, of course, true that the Government possesses the name and address of every physician in legal practice in the United States, but the card catalogue which we are assembling in Massachusetts would facilitate the work of the Government and make it easier to choose the physicians who are best fitted for the necessary military work.

J. B. BLAKE,
For the Committee.

MEDICAL NOTES.

PROSPECTIVE MEDICAL MEETINGS.—Several important medical meetings are to be held in this country this week and next. The twenty-ninth annual meeting of the American Pediatric Society was held at White Sulphur Springs, West Virginia, on May 28, 29 and 30, under the presidency of Dr. Frank Spooner Churchill of Chicago. At the various sessions a series of forty-three papers was presented. The forty-second annual meeting of the American Gynecological Society will be held at Pittsburgh, Pa., on May

* Tissue Alteration in Malnutrition and Pellagra. By John Sundwall. Hygienic Laboratory. Bulletin No. 106. January, 1917.

31, June 1 and 2, under the presidency of Dr. Frank Farrow Simpson of that city. The American Academy of Medicine, the American Medical Association, and the American Medical Editors' Association will all hold their annual meetings in New York City on June 4 and 5. The second convocation of the American College of Physicians will take place at the Hotel Nassau, Long Beach, Long Island, on June 5, 1917. About 90% of all the Fellows who have not entered on duties connected with the war are expected to be present. About fifty physicians of national repute will be admitted to Fellowship.

WAR NOTES.

HARVARD MEDICAL UNIT.—The following item relative to the Harvard Medical Unit, appeared in a recent issue of the *Lancet*.

"Dr. Hugh Cabot and Dr. George C. Shattuck, of Boston, U. S. A., with 14 doctors and 17 nurses, arrived in London last week *en route* to France to reinforce the Harvard University Unit which has charge of one of our general hospitals. The unit is under the command of Sir Alan Perry, who met the new detachment. Dr. Cabot and Dr. Shattuck have already served a term at the hospital. It was rightly felt in the United States that to brave the perils of submarines was a fine action, and the unit had an enthusiastic send-off at Boston."

ACCEPTANCE OF HOSPITAL UNIT FOR NERVOUS DISEASES.—Surgeon-General W. C. Gorgas has written as follows to Governor McCall in acceptance of the offer to organize a unit for the care of nervous diseases among soldiers.

"My dear Governor McCall—In reply to your telegram of the seventeenth instant, I desire to thank you for your tender of the hospital unit for the care of soldiers suffering from nervous and mental diseases, and to say that it will be used in accordance with the plans submitted by the National Committee for Mental Hygiene, which committee has kindly taken charge of the supervision of all such units organized in the United States.

I am, my dear Governor, with kindest regards,
Yours very sincerely,

(Signed) W. C. GORGAS,
Surgeon-General, U. S. Army."

FREEDOM OF CANADIAN TROOPS FROM TYPHOID.—The efficacy of anti-typhoid inoculation is again evidenced by the freedom from typhoid fever which has prevailed among troops of the Canadian Expeditionary Force in Canada. This freedom is commented upon as follows in the issue of the *Lancet* for March 31:

"The Provincial Board of Health for Ontario has supplied to date all the typhoid and paratyphoid vaccine used by the entire Canadian Expeditionary Force, about 450,000 men.

In all, nearly 600,000 doses have been supplied free of cost. The Department of Militia and Defense have just announced that for the 12 months ending Dec. 31, 1916, 167 cases only of typhoid fever were reported as having occurred among the thousands of men of the C. E. F., and this notwithstanding the fact that typhoid fever is a disease especially affecting young adults from 17 to 30 years of age, and a disease which is endemic in all parts of Canada. This comparative freedom on the part of the force is seen to be most striking when it is recalled that, during the Boer war, one man out of every nine in the British forces in South Africa was invalided through this disease, and that in the Spanish-American war, of 107,000 men in the camps at Tampa, Florida, and elsewhere, who had not left the shores of the United States, 20,000 contracted the disease. The remarkable change can be attributed only to the process of inoculation, and Dr. John W. S. McCullough, chief medical officer of health of the Province of Ontario, may be congratulated on the good results of systematic work."

A PREMONITION OF THE RED CROSS.—In the issue of *La Medicina Pratica* for February 28, 1917, is an item, quoted in the *British Medical Journal* of March 31, describing a curious medieval premonition of the foundation of the Red Cross, which the author considers to have had its origin in the action of the Venetian Republic after the battle of Fornovo on July 6, 1495, when the army of Charles VIII, retreating to France, narrowly escaped destruction in the Apennine passes:

"In a narrative written in the form of a diary, an eye-witness, Alessandro Benedetti, who served as a surgeon with the Venetian army, says there were many Frenchmen among the wounded, but all were treated by the Venetian doctors at the public expense. Melchior of Treviso, procurator of the army, had those who could not keep up in the march carried to Parma, supplied them with money in the name of the Senate, and provided surgeons at a liberal scale of pay. 'The good jovial old man,' says Benedetti, 'now Vice-General of the fleet, went round the beds and exhorted the patients to be of good cheer; among them were wounded Frenchmen.' The people of Parma marvelled greatly at the clemency shown by the Venetians toward enemies. This, says Paolo Piceca, the writer of the article, which first appeared in the *Rivista Ospedaliera* in 1911, is the first instance of such humanity recorded in history. When, in 1581, Alessandro Farnese, Duke of Parma, made terms for the capitulation of Tournay, allowing the garrison to come out with the honors of war and undertaking to take care of such wounded enemies as could not be removed, it is very probable that, remembering the noble example set by the Venetians eighty-six years before, he was moved to give it for the first time

a more concrete form by embodying it in a formal treaty. On this action is based the claim put forward for Italy to have initiated a radical reform of the barbarous customs of war, which found its consecration in the Geneva Convention, and its practical realization in the foundation of the Red Cross in 1864."

BOSTON GIFT OF AMBULANCE UNIT.—The gift of Mrs. William Weld, Mrs. Charles C. Weld and Miss Mary Weld, of Boston, of a unit for service in the ambulance corps in France, is in readiness for service, and under the command of Basil K. Nottell of Larchmont, N. Y., left, on April 30, for France. The cars will comprise Section 17 of the American field ambulance service. Each car bears the inscription, "From citizens of Boston, Mass., U. S. A., in the cause of Democracy, Liberty and Humanity—the Dr. Charles Goddard Weld Ambulance Section." The section is comprised of twenty-five members, from Chicago, Wisconsin, Cornell and other universities.

AMERICAN SURGEONS IN FRANCE.—The need of surgeons among British and French forces will be met by American surgeons who will go to France as members of the medical corps of the United States Army. This was announced after a conference between Secretary Baker and Major Dreyfus, medical officer of the French commission. The general medical board of the Council of National Defense has arranged that one thousand surgeons, picked by the American College of Surgeons, may be called for such service at any time.

COURTESY TO A GERMAN PHYSICIAN.—A gratifying instance of American courtesy to an interned physician of an enemy country occurred in the recent release of Dr. Paul Wegeman from the internment camp at Galloup's Island. Dr. Wegeman, who was surgeon of the Hamburg-American S. S. *Cincinnati*, has been in ill health and is released on this ground. He has been granted safe conduct by the department of state, and sailed a few days ago from New York for Holland, in company with the Austrian and Turkish consular agents who were leaving this country.

MASSACHUSETTS STATE GUARD.—On May 1 the headquarters of the Massachusetts Committee of Public Safety announced that petitions have already been received from thirty cities and towns in this Commonwealth for permission to organize state guard units to serve for the duration of the war. Five of these petitions have been granted,—in New Bedford, Clinton, Malden, Fitchburg and Newton. Governor McCall has appointed Dr. William A. Brooks as chief surgeon of the state guard with the rank of Lieutenant-Colonel, and has made the following nominations for the medical and surgical staff to

serve under him: Surgeons, Dr. Hardy Phippen, Salem; Dr. C. E. Durant, Haverhill; Dr. T. B. Smith, Springfield; Dr. L. F. Woodward, Worcester; Dr. P. Truesdale, Fall River; Dr. G. DeN. Hough, New Bedford; Dr. F. H. Thompson, Fitchburg. Assistant surgeons, Dr. Donald V. Bates, Brookline; Dr. W. E. Browne, Boston; Dr. Harold G. Giddings, Allston; Dr. G. W. Morse, Boston; Dr. H. F. Sheldon, Boston; Dr. B. E. Sibley, Brookline; Dr. E. A. Suppie, Boston. Physicians: Dr. J. W. Dewis, Boston; Dr. T. F. Harrington, Boston; nose and throat surgeon, Dr. G. L. Tobey, Jr., Boston; dental surgeon, Dr. K. H. Thoma, Boston; roentgenologist, Dr. A. W. George, Boston; ophthalmic surgeon, Dr. R. T. Loring, Boston.

TWO NEW UNITS FOR FOREIGN SERVICE.—The New York Presbyterian base hospital unit No. 2 of the American Red Cross has sailed for France, commanded by Elbert E. Persons of the Medical Corps of the United States Army. Dr. George E. Brewer is director of the unit, which includes twenty-three doctors and sixty-five nurses. The hospital will be equipped to care for five hundred cases at a time.

Dr. Hugh H. Young, director of the James B. Brady Urological Institute of Johns Hopkins Hospital, has been commissioned Major and will leave shortly for France with a staff of surgeons who have specialized in urology. The group will form a hospital base unit to take care of cases of urological diseases.

TRAINING WAR DENTISTS.—The Trustees of the Forsyth Dental Infirmary, Boston, have established a course for the instruction of dental surgeons for the Dental Reserve Corps of the United States Army. It is estimated that more than one thousand dental surgeons will be required within one month. The first course began on May 28, and will cover a week's time. It is hoped to recruit one thousand dental surgeons within a month. Representatives of the surgeon-general will examine candidates for the corps. In establishing the course, the infirmary trustees are complying with a request from the dentistry committee of the medical board of the Council of National Defense.

ARMY MEDICAL ASSIGNMENTS.—The following regular army medical officers have been assigned to command the six American Red Cross Base Hospital Units, whose departure for France was noted in a recent issue of the JOURNAL: Maj. Robert U. Paterson, chief of Red Cross Bureau, No. 5 Hospital, from Harvard Medical School, with Dr. Harvey Cushing as director. Maj. Elbert E. Persons, No. 2, New York Presbyterian Hospital; Dr. George E. Brewer, director. Maj. Harry L. Gilchrist, No. 4, Cleveland; Dr.

George W. Crile, director. Maj. Matthew A. Delaney, No. 10, Pennsylvania Hospital, Philadelphia; Dr. Richard H. Harte, director. Maj. James D. Pife, No. 21, Washington University Hospital, St. Louis; Dr. Frederick T. Murphy, director. Maj. Christopher C. Collins, No. 12, Northwestern University; Dr. Frederick Besley, director.

The following army medical officers have also been assigned to duty in the French military hospital at Ris Orangis: Maj. William L. Keller, Captain Daniel P. Card and Captain George M. Edwards. Maj. Robert M. Culler is assigned to duty in the French Hospital at Passy, France. Those already departed for foreign hospitals are Capt. Stanhope Bayne-Jones and Lts. Benjamin M. Vance, William D. Jack, Percy Musgrave, George L. Stiekney, Everett D. Plass and John A. C. Colston.

COMPLETION OF RED CROSS SUPPLIES.—The Metropolitan Chapter, American Red Cross, has completed its stock of supplies for the three base hospitals organized in Boston. The cost of supplies for each unit is more than \$25,000. In making these supplies the Red Cross has had the cooperation of numerous local branches, the Special Aid Society, and the surgical dressings committee of the National Civic Federation. The supplies are in the possession of Col. J. C. R. Peabody, director of Red Cross supply dépôt No. 1, and will be immediately available when the need for them arises. During the last year large consignments of hospital supplies have been forwarded to the Allies. Seventy boxes have been sent to France, fifteen to Italy and thirteen to England.

A TUBERCULOSIS WAR PROGRAM.—The Boston Association for the Relief and Control of Tuberculosis has announced the plan of the National Association for the Study and Prevention of Tuberculosis for mobilizing the country's resources for the prevention of tuberculosis among enlisted soldiers and sailors.

In its memorandum to the local Association, the national society points out that it has undertaken this far-reaching work at the request of the Council on National Defense.

The keynote of the plans of the National Association is practical service, with as little duplication of effort as possible. The bulletin, for example, urges all local societies to leave the matter of relief for tuberculous soldiers and their families to the civilian relief committees of the American Red Cross which are being organized in connection with chapters. Where there are no Red Cross chapters, local tuberculosis agencies may take up the question of civilian relief with the Department of Civilian Relief in Washington.

Visiting nurses engaged in tuberculosis work, either exclusively or on part time, to the num-

ber of more than 5,000, will be made available for home treatment and for preventive educational work among the enlisted men.

Educational work, the furnishing of literature to men in camps, the furnishing of lecturers, motion picture exhibits and other educational equipment for men in camp, and co-operation with federal and state officials in furnishing special placards and certain sanitary supplies which the government would not ordinarily furnish, are among the concrete suggestions made by the National Association to the local society.

"No other groups in the United States are so familiar with the principal men who are qualified to diagnose and handle tuberculosis as the anti-tuberculosis association, both state and local," says the National Association. "These organizations will be called upon to suggest men who can qualify as experts, particularly in the diagnosis of tuberculosis. As the demand for enlistment increases, the experience of other countries at war demonstrates that the supply of skilled physicians who are competent to treat and diagnose tuberculosis will be taxed to the limit. Every effort will be made to protect the enlisted men of the United States Army from the fatal experience of some European armies in relation to tuberculosis.

Whether this government is called upon to send a large expeditionary force to Europe or not, the mobilization of hundreds of thousands of troops will without doubt greatly increase the seriousness of the tuberculosis problem both in the military and in the civilian population. Anti-tuberculosis associations are urged, therefore, not to curtail their normal functions any more than absolutely necessary, but, on the other hand, to press forward, utilizing the interest as a channel for focusing, more clearly than ever before, the attention of the public upon the problem of tuberculosis."

The Executive Committee of the Boston Association endorses this program of the National Association. The Executive Committee also goes on record as in favor of War Prohibition. The Committee has voted to offer a large part of the land (20 acres) on which Prendergast Camp is located in Dorchester to the Government or the Massachusetts Committee on Safety for their use.

ARRANGEMENTS FOR CARE OF WOUNDED IN NORTHEASTERN DEPARTMENT.—At a conference held between Boston hospital executives and Major James F. Hall, assistant department surgeon, plans were made for care of American wounded brought from European battlefields to New England. A census is to be taken of all available hospital facilities, as well as a list of all public and private buildings which can be turned into hospitals, and a list of places where soldiers may finally recover from their wounds. While every department will take care of its

own soldiers as far as possible, the Northeastern Department will give temporary care to wounded soldiers landing at its ports.

ARRIVAL IN ENGLAND OF HOSPITAL UNITS.—The first of the six Red Cross Hospital Units to go to France for war service has arrived safely in England. The unit comprises about 300 physicians, twenty army officers, sixty nurses and more than two hundred attachés. This unit will be the first officially sanctioned by the United States Government to carry the American flag to the battlefields of France since the United States entered the war. After a brief stay in England, the unit will be sent to the continent; where it will take charge of a base hospital behind the British front. The hospital will have accommodations for five hundred patients and be fully equipped by the British hospital service.

APPOINTMENTS OF MEDICAL OFFICERS.—The following men in the Northeastern Department have received appointments to the Officers' Reserve Corps:—

Medical Corps with Rank of Major—John Warren, Horace D. Arnold, Theodore Smith, Richard C. Cabot, Robert B. Osgood, Fred B. Lund, Boston; Harvey Cushing, Brookline; Roger I. Lee, Cambridge; Howard W. Beal, Worcester.

Medical Department with Rank of Captain—Charles B. Tellings, Timothy Goulding, William J. Mixter, Z. B. Adams, John T. Bottomley, James S. Stone, Arthur E. Austin, Boston; Lester Winslow Lord, West Ossipee, N. H.; Warren S. Kershner, Bath, Me.; Harvey A. Kelley, Winthrop; Alfred W. Maskell, Portland, Me.; Herbert W. Taylor, Brattleboro, Vt.; Charles Whelan, Hingham; Frank W. George, Worcester; Walter R. Weiser, Springfield; Richard Blackmore, Norfolk, Conn.; Isaac S. F. Dodd, Pittsfield.

Medical Department with Rank of First Lieutenant—James H. Means, Augustus Riley, Charles B. Spruit, Boston; Clarence E. Burt, New Bedford; Harry P. Burns, Parker M. Cort, Ernest Leland Davis, John M. Mahoney, James H. Quinn, E. Tenney Smith, Philip Kilroy, Springfield; Nathan Pulsifer, Lowell; Fred T. Keyls, West Leverett, Me.; Blake F. Donaldson, Milford, N. H.; Harold H. Arnold, New Haven, Conn.; Charles E. Cook, Jr., South Berwick, Me.; David E. Dolloff, Biddeford, Me.; John H. C. Gallagher, Chicopee; Matthew H. Griswold, Kensington, Conn.; Lewis Brooks Hayden, Livermore Falls, Me.; Louis E. Mannix, Chicopee Falls; John S. Milliken, Readfield, Me.; Pierce Bergeron, Manchester, N. H.

ORGANIZATION OF HOSPITAL AND AMBULANCE COMPANIES.—The war department has authorized the formation of seven hospital companies and seven ambulance companies in Massachusetts. The hospital companies will include

seventy-three enlisted men and six officers and the ambulance companies will include one hundred fifty men and five officers. The seventy-seven officers to be commissioned will be physicians. All the units will be attached to the French expeditionary force and will be organized and sent to the front as soon as possible.

PHYSICIANS' CASUALTIES IN THE BATTLE OF THE SOMME.—In moving recently the second reading in the House of Lords of the bill to review military exemptions, the Earl of Derby, British Secretary of State for War, announced that in the Battle of the Somme alone over four hundred physicians were either killed or wounded, and that the British Army was at least lamentably, if not critically, short of medical men.

PRESBYTERIAN HOSPITAL AND COLUMBIA UNIVERSITY UNIT.—The personnel of the Presbyterian Hospital and Columbia University Base Hospital Unit, which has recently sailed for France, has been announced as follows:

Drs. George Emerson Brewer, Homer Swift, William Darraach, Sidney R. Burnap, Fordyce B. St. John, Alex. McCreery, John A. Peters, Benjamin R. Allison, William F. Cunningham, William Barclay Parsons, Robert Kennedy, William C. Woolsey, Gerhard Cocks, Armitage Whitman, Willard B. Soper, Louis Casamajor, Alwin M. Pappenheim, A. R. Stevens, Roderick Grace, Austin Hobbs, Malcolm McBurney, Henry S. Dunning and E. H. Raymond.

UNIVERSITY OF MINNESOTA FIELD HOSPITAL UNIT.—It is announced that the Mayo Foundation of the University of Minnesota has offered to the United States Government for foreign service a fully equipped field hospital unit to be headed by Dr. William J. Mayo. This organization is to be known as the University of Minnesota Field Hospital Unit and is to have five hundred tented beds of the latest model, full surgical apparatus and a portable shelter as an operating room. Other members of the personnel of this unit are: Dr. E. H. Plummer, Dr. Charles Judd, Dr. Frank C. Todd, Dr. H. Robertson and Dr. S. Marx White.

AMERICAN SURGEONS FOR SERVICE IN EUROPE.—It is announced that the American College of Surgeons has offered to send to Europe for service with the allied armies one thousand American surgeons. The deans of forty-six medical schools, after conference with the general medical board of the Council of National Defense, have agreed to continue instruction during the summer without shortening courses, so as to furnish new graduates to take the place of physicians from schools and hospitals, who will thus be freed for army service.

ROCKEFELLER FOUNDATION.—On May 4 it was announced in New York City that the Rockefeller Foundation has appropriated \$475,000 to

be spent in the United States for medical research, and \$400,000 for the continuation of war relief activities in Europe.

"To aid the work of the Young Men's Christian Associations in the training camps to be established for the army and navy, \$200,000 has been appropriated by the foundation. A budget of \$3,000,000 is sought by the National Ward Work Council of the Y. M. C. A. This work will be similar to that carried on by the international committee of the Y. M. C. A. in war camps abroad and in American camps on the Mexican Border last year.

An appropriation of \$200,000 also has been made to the Rockefeller Institute for Medical Research for the Carrel Hospital to be established during the next few months in connection with it. This model hospital of 100 beds under the direction of Dr. Alexis Carrel, is to be used to teach the new methods of surgical treatment for infected wounds, worked out by Dr. Carrel and Dr. Dakin in France. American military surgeons and doctors will thus have the benefit of the three years' experience in war surgery abroad.

The Rockefeller Institute receives a further appropriation of \$60,000 for instructing military and other surgeons in new methods of diagnosis, for the preparation of sera, similar to those it has sent abroad, for use in army camps, and for the purpose of finding improved means of treating peritonitis and shock.

Funds also are provided for a thorough study, abroad, of mental diseases among soldiers, and the kinds of provision needed for their care at the front and in base hospitals. This investigation is to be undertaken by Dr. Thomas W. Salmon, medical director of the National Committee for Mental Hygiene, who is to supervise American psychiatric hospitals to be established by the Government. Dr. Salmon will develop methods of receiving, classifying and distributing the various kinds of mental and nervous disorders.

To provide a building for the naval psychiatric hospital, to be erected on the grounds of the United States Marine Hospital in New York, the foundation has appropriated \$13,000. The buildings are to be erected by the National Committee for Mental Hygiene and operated by the United States Public Health Service.

During the month of April the foundation made gifts and pledges for European war relief amounting to \$450,000.

This brings the total appropriations for European relief, as previously announced, to \$4,181,952."

NEED OF AMERICAN PHYSICIANS IN THE WAR.—Report from Chicago states that on May 8, Dr. Franklin H. Martin of that city, chairman of the medical division of the Council of National Defense, issued the following statement and appeal addressed to the doctors of America.

"With our country entering the war, the responsibility for which we as doctors have been preparing, is now upon us. The Englishmen and Frenchmen, now our Allies, have come to tell us their problems. Their need for medical officers is acute. Their civil population is without adequate medical protection and the ravages of war in the fighting line have been unusually severe in the destruction of medical officers and ambulance attendants. Two thousand medical officers for France and England and five thousand ambulance attendants, if immediately available, would scarcely fill their requirements."

"We have listened to their appeal and the council is seeking to help them as promptly as possible. The Secretary of War, the Chief of Staff and the Surgeon General have authorized and are now executing the following plan:

"(A)—General Gorgas is mobilizing and equipping in groups of two hundred doctors who are now members of the Medical Officers' Reserve Corps. A group of two hundred will sail each month, the first leaving within the next three weeks.

"(B)—Six Red Cross base hospital units with twenty-four doctors, nurses and a supporting personnel, aggregating 196 each, have been ordered by the War Department to France for immediate service.

"(C)—One hundred and ten hospital units with approximately 3000 automobile ambulances and 5000 men asked for by France, will be dispatched within the next three weeks.

"These are the modest requests. The medical profession is prepared to meet the call and treble or quadruple it if need be. Every doctor under fifty-five years of age who has not responded to the call to enroll in the Medical Officers' Reserve Corps should do so at once. Every doctor who is already a member of the Medical Officers' Reserve Corps or an applicant should place himself at the disposal of the Government through the surgeon-general's office. This will enable the surgeon-general to utilize the younger men for active duty at the front and assign the older men now engaged in teaching medical students and in the care of civilian population at home, to pursue the work for which they are best fitted and maintain a normal supply of medical graduates.

"The medical profession has been honored with the first call by those who have been fighting our cause. Let us respond generously."

According to Maj. Philip W. Huntington of the Army Medical Corps, the Medical Reserve Corps is lacking ten thousand men to fill adequately its ranks, and the Medical Corps, 1300 men. A rally of physicians was held in New York on May 10 in the endeavor to induce medical men to enlist in the Corps.

An overwhelming number of nurses will also be required to take care of the first half million troops that America sends abroad.

WAR COUNCIL OF THE RED CROSS.—President Wilson has created a war council of the Red Cross whose head is Mr. Henry P. Davidson of J. P. Morgan & Co. In accepting the position, Mr. Davidson offered the facilities of the Morgan Company to the Red Cross for the duration of the war. The other members of the council will be former President Taft, Charles D. Norton, Cornelius N. Bliss, Jr., and Grayson M. P. Murphy of New York, Edward N. Hurley of Chicago and Eliot Wadsworth of Boston. In announcing his appointments President Wilson states:

"I have today created within the Red Cross a war council to which will be entrusted the duty of responding to the extraordinary demands which the present war will make upon the service of the Red Cross, both in the field and in civilian relief. The best way in which to impart the greatest efficiency and energy to the relief work which this war will entail will be to concentrate it in the hands of a single experienced organization which has been recognized by law and by international convention as the public instrumentality for such purposes. Indeed, such a concentration of administrative action in this matter seems to me absolutely necessary, and I hereby earnestly call upon all those who can contribute either great sums or small to the alleviation of the suffering and distress which must inevitably arise out of this fight for humanity and democracy, to contribute to the Red Cross. It will be one of the first and most necessary tasks of the new war council of the Red Cross to raise great sums of money for the support of the work to be done, and done upon a great scale.

"I hope that the response to their efforts will be a demonstration of the generosity of America and the power of genuine practical sympathy among our people that will command the admiration of the whole world."

The Boston Metropolitan Chapter of American Red Cross was at once notified by Mr. Wadsworth to begin raising funds for the relief work contemplated. Allston Burr, chairman of the Boston chapter, has begun the work in Boston of collecting the greatest war relief fund ever undertaken in America. The funds raised are to be deposited in a special account to be known as the Red Cross War Fund and will be transmitted to national headquarters as required.

MEDICAL STUDENTS IN THE WAR.—The Medical School Committee of the Medical Board of the Council of National Defense has recently made the following report with regard to the duties of medical students during the war.

"In your effort to solve the urgent problem before this board and assist the surgeon-general in supplying an adequate number of medical officers for the Army and Navy, it is important that this country should not repeat England's blunder at the outbreak of the war in

permitting the disorganization of the medical schools either by calling the faculties into active service or sanctioning the enlistment of medical students into any of the line organizations. Ordinary foresight demands that we face the possibility that the war upon which we have entered may last for years. Medical schools to supply trained men for the future as well as the present emergency must be kept in active operation under any circumstances. While aiding to the uttermost in overcoming the present shortage of men, the necessity of keeping the source of supply open emphasizes the importance of conserving our raw material. Therefore, men now in college, looking forward to medicine as a career should be made to understand that it is their patriotic duty to the nation at this time to continue their studies and enroll in the medical school of their choice. Furthermore, no medical student who has not completed three years of medical work should be permitted to give up his course, as the country needs his trained and not his untrained service.

There are, however, ways in which the medical schools can help the present situation. The following suggestions are made for your consideration and action:

1. Medical schools should be prepared to graduate senior medical students promptly in case of need. The faculties should urge all graduates who can be relieved of their obligations as internes in civil hospitals to enroll in the medical corps of the Army and Navy.

2. Medical schools should be encouraged to consider as a form of service, the Italian plan by which base hospital units can be organized through the Red Cross. These military hospitals carry with them the clinical faculty and students as medical personnel. This type of organization meets two ends—practical help can be rendered to the Army or the Navy in time of war and instruction may be continued at the base. This permits the graduation of men directly into the junior grades of the Army after the most practical form of military instruction.

3. Fourth-year students may be allowed to substitute, in special cases, service in a base hospital for the fourth year in the hospital at home when opportunities are offered for instruction in such military institutions.

4. Medical schools that do not adopt the Italian plan should be prepared to reduce the faculties to the minimum required for routine work and enroll all men so liberated in the Medical Officers' Reserve Corps.

To put these recommendations into immediate effect, the committee suggested that the Council of National Defense send a telegram to the deans of all medical schools, urging that all medical students until the fourth year is reached should be discouraged from enlisting at present in any line or sanitary organization; and another telegram to the presidents of all

colleges and universities saying that national safety demands that all undergraduates planning to study medicine should enroll in the medical school of their choice at the earliest possible moment."

WAR RELIEF FUNDS.—On May 26 the totals of the principal New England war relief funds reached the following amounts:—

Belgian Fund	\$609,975.28
French Wounded Fund	228,288.67
Armenian Fund	183,758.31
Serbian Fund	121,485.66
Permanent Blind Fund	114,739.90
British Imperial Fund	99,547.00
Surgical Dressings Fund	91,737.97
Italian Fund	41,330.87

BOSTON AND MASSACHUSETTS.

WEEK'S DEATH RATE IN BOSTON.—During the week ending May 26, 1917, the number of deaths reported was 212, against 273 for the same period last year, with a rate of 14.31 against 18.72 last year. There were 25 deaths under one year of age, against 51 last year, and 70 deaths over 60 years of age, against 70 last year.

The number of cases of principal reportable diseases were: diphtheria, 64; scarlet fever, 29; measles, 218; whooping cough, 22; typhoid fever, 3; tuberculosis, 71.

Included in the above were the following cases of non-residents: diphtheria, 3; scarlet fever, 2; measles, 1; whooping cough, 1; typhoid fever, 1; tuberculosis, 3.

Total deaths from these diseases were: diphtheria, 4; measles, 5; tuberculosis, 19.

Included in the above were the following deaths of non-residents: diphtheria, 1; measles, 1; tuberculosis, 2.

SCARLET FEVER IN CLIFTONDALE.—Owing to the prevalence of scarlet fever in Cliftondale, five public schools were closed and fumigated. Five children and one man have been removed to the Lynn Contagious Hospital. Two children have already died of the disease.

THE MASSACHUSETTS THERAPEUTIC MESSAGE ASSOCIATION.—The next meeting will be held at the Hotel Brunswick, at 8 p.m., on Friday, June 1, 1917. A paper on "Writer's Cramp and Allied Affections" by Dr. Douglas Graham, will be read. Mr. John Anderson has kindly consented to give some humorous readings in the Scotch dialect. Please be prompt and thus show your appreciation.

DOUGLAS GRAHAM, M.D., *President*,
MRS. MABEL F. WALKER, *Secretary*.

BOSTON DISPENSARY.—In its 120th annual report, the Boston Dispensary states that it has cared for 40,000 men, women and children during the past year. Among these patients were 15,000 babies or little children and about 20,000

wage-earners and mothers of families. Evening clinics have been developed to provide for people who must lose wages if they come for medical attention in the daytime. In caring for 15,000 babies last year, the services of the dentist, the throat specialist, the oculist and the orthopedist were all enlisted. School children in large numbers were brought in by the school nurses for treatment in remedying physical defects. The increased prices of medical and surgical supplies, as well as the soaring prices of drugs, threatens to handicap the work of the Dispensary in the coming year unless its friends rally to its support. The board of managers is making an especial appeal for aid in order that the productive efficiency of the community may not suffer in these critical times because of the ill health of the wage-earners. Contributions should be sent to Ashton L. Carr, vice-president of the State Street Trust Company, who is treasurer of the organization.

NON-PULMONARY TUBERCULOSIS IN MASSACHUSETTS.—The investigation of the facilities for treatment of non-pulmonary tuberculosis, provided by the State, has resulted in the following conclusions:

1. The actual need for special institutions for the treatment of cases of non-pulmonary tuberculosis is not at present recognized by the majority of the medical profession.

2. General use has not been made of the already available beds in existing institutions.

3. Within the next two years, the number of available beds for pulmonary tuberculosis cases will be increased by over 900 beds, when the cities of over 50,000 population carry out their contemplated plans, and the county commissioners discharge the duties imposed upon them by the Legislature of 1916. The completion of these hospitals should give the opportunity so much needed for the segregation of different classes of tuberculosis cases in the various private, municipal and State sanatoria, which segregation may have some bearing on this subject.

4. The Hospital School at Canton, and, to a limited extent, the Hospital Cottages at Baldwinville, are already organized, equipped, and at work with good results along lines most needed by the non-pulmonary tuberculosis cases. By extending their work, the present needs for the care of non-pulmonary cases can be met.

5. Until such time as the whole work for tuberculosis cases in general has adjusted itself to the increased facilities that the next two years will furnish, it would not be advisable to consider the building and organizing of any new institution for the non-pulmonary tuberculosis cases.

DR. WALCOTT AND THE CAMBRIDGE HOSPITAL.—The trustees of the Cambridge Hospital have recently adopted the following minute on the occasion of the resignation of Dr. Henry P.

Walcott after many years of service as president of the board:

"The trustees of the Cambridge Hospital learn with deep regret that, at the annual meeting of the corporation, Dr. Henry P. Walcott positively declined reelection as its president or as trustee. While we cannot but admit that Dr. Walcott's long and active devotion to the institution justly entitles him to relief from the cares and responsibilities of his official duties, we one and all feel that his withdrawal takes from our board one in the highest degree qualified to assist in the administration of its affairs; and we also feel that the occasion should not be allowed to pass without some recognition, inadequate though it may be, of his many years of valuable service.

From the records it appears that Dr. Walcott was one of the original trustees and charter members of the hospital, and has served as trustee for more than 46 years. It further appears from the records that he served as secretary of the board from May 7, 1874, until April 6, 1892, and as president from the latter date until April 4, 1917. During his eight years' service as secretary he was absent from only seven meetings, and this fact may be taken as a fair indication of the faithful and unremitting loyalty which has always characterized his interest in the hospital.

Conversant with all the details of its inception and growth, equipped with a medical education, gifted with good, sound common sense, familiar by practical experience with the multifarious questions pertaining to the health of the general public, and intimately connected with other and larger institutions of a similar nature, he was always fruitful in suggestion, wise in counsel, and effective in administration, in everything tending to enlarge and improve the scope of our work. In his retirement from active connection with the hospital we feel that we have lost a sagacious leader, a valuable adviser and an indefatigable co-worker, but we are confident that we may still count him one of the best friends of the hospital, and we wish for him the enjoyment of his well-earned rest for many years."

PROGRESS OF SEVERAL FUNDS.—The fund for the New England Hospital for Women and Children reached, on May 6, the sum of \$67,281.96.

The Infantile Paralysis Fund, raised to aid the Harvard Infantile Paralysis Commission in its campaign against the disease in Massachusetts, has reached \$10,484.95.

The board of lady visitors of the Boston Lying-in Hospital announce that they have received contributions totaling \$41,406.58 for the erection of the new hospital.

SMALLPOX IN WORCESTER.—On May 14 three new cases of smallpox had been reported to the

Worcester Board of Health, making a total up to that time of thirteen cases.

LOBAR PNEUMONIA NOW REPORTABLE.—The Massachusetts State Department of Health, at a meeting held April 3, 1917, voted that the list of diseases declared dangerous to the public health within the meaning of sections 49, 50 and 52 of Revised Laws 75, as amended, be further amended by adding lobar pneumonia, beginning May 1, 1917, so that said list now reads as follows:

Actinomyces, Anterior poliomyelitis, Anthrax, Asiatic Cholera, Chicken-pox, Diphtheria, Dog-bite (requiring antirabic treatment); Dysentery:—(a) Amebic, (b) Bacillary; Epidemic Cerebrospinal Meningitis, German Measles, Glanders, Hookworm disease, Infectious diseases of the eye:—(a) Ophthalmia Neonatorum, (b) Conjunctivitis, (c) Trachoma; Leprosy, Malaria, Measles, Mumps, Pellagra, Plague, Pneumonia (lobar only), Rabies, Scarlet fever, Septic sore throat, Smallpox, Tetanus, Trichinosis, Tuberculosis (all forms), Typhoid fever, Typhus fever, Whooping cough, Yellow fever.

AMERICAN ACADEMY OF DENTAL SCIENCE.—At the annual meeting of the American Academy of Dental Science held in Boston on May 16 the following officers were elected:

President, Dr. Henry H. Piper; vice-president, Dr. William Rice; recording secretary, Dr. Maurice E. Peterson; corresponding secretary, Dr. Harry W. Haley; treasurer, Dr. Charles A. Jameson; outside guard, Dr. Martin B. Dill; inside guard, Dr. Leroy M. S. Munroe. The executive committee comprises Dr. Charles A. Parkhurst, Dr. Carl A. Lundstrom and Dr. Edward M. Kent.

Dr. W. E. Borden and Prof. G. A. Bates of Tufts Dental School were appointed a committee to see what could be done in the line of dentistry to help qualify recruits in the United States army for service, and also to offer the resources of the academy to volunteers and members of all branches of the service.

BABY HYGIENE ASSOCIATION.—The eighth annual report of the Baby Hygiene Association covers a period ending March 1, 1917. Two new stations have been added during the year, one at the Health Unit at 17 Blossom Street, West End. This Health Unit, under the direction of the Boston Health Department, afforded the opportunity for the different organizations doing public health work in this district to have their headquarters under one roof. The other station was opened at Grove Hall, a district in which there was great need of such service, but which had been inaccessible to the stations already established. The use of rooms was given the Association in the building of the Young Men's Hebrew Association and it was through the interest and financial support of the Jewish people that the new station was made possible. The report goes on to state:

"The term 'milk' station becomes each year less and less descriptive of the work our stations are doing. Last year 52% of the babies registered were entirely breast fed; these babies came to us only for the advice and instruction of our physicians and nurses. Milk is now dispensed at only eight of the thirteen stations, and the amount sold is getting less each year. Mothers have learned that 'baby' milk is simply another name for clean milk; and they have also learned that, for well babies at least, complicated laboratory modifications are unnecessary and that they themselves are able to prepare their babies' milk in the home. A constantly decreasing amount of milk modified at the laboratory is sold; last year only 2% of the babies registered used this milk, and these were, for the most part, babies partially breast fed."

CAMBRIDGE MUNICIPAL HOSPITAL.—The new Cambridge Municipal Hospital will be formally opened on May 28, and on June 1 patients will be admitted. The medical profession is invited to inspect the Hospital on May 28 and the public on May 29.

LEPROSY IN SALEM.—A case of leprosy occurring in a leather worker, who came from Constantinople to this country less than a year ago, has been discovered in Salem. The diagnosis was made at the Massachusetts General Hospital and the man will be removed to Penikese Island.

THE PASSING OF TYPHOID FEVER IN MASSACHUSETTS.—The Public Health Bulletin of the State Department of Health of Massachusetts, in its April number, makes the following statement regarding the passing of typhoid fever in this state.

The typhoid death rate for the State for 1916 shows a remarkably low figure, 4.5 per 100,000, the lowest figure that Massachusetts has ever known. The persistent decrease in the past three decades has been due to many sanitary methods carried out in the State,—primarily to the prevention of sewage pollution of public and private water supplies, supplemented in later years by such agencies as the increasing pasteurization of milk, inspection of the production of milk, investigation into causes of outbreaks, food inspection and the use of laboratory facilities in confirming diagnoses and in detecting carriers.

Typhoid vaccine is now being used extensively by many physicians as a prophylactic. Local authorities are increasingly urging the necessity for carrying out hospitalization of cases because of the difficulty of preventing its spread to other members of the family when it is treated in the household. A recent instance may be cited where four cases of typhoid fever followed a primary case that was being cared for at home, one of the four secondary cases being the nurse. Immunization of members of

a household by typhoid vaccine is to be encouraged in families where a case of typhoid occurs, as this will prevent the appearance of numerous secondary cases.

When a few years ago health authorities began to deal in health problems through the medium of rates, a typhoid death rate of 15 or 20 per 100,000 was considered extremely low for a State or even a city. Then came the introduction of sanitary engineering, and more attention was paid to furnishing a pure water from a bacterial standpoint, the result being that water-borne diseases showed an immediate decrease in nearly every instance.

The low death rate of 4.5 per 100,000 shown by Massachusetts for 1916 is a mark that must be slowly approaching the limit of the typhoid death rate that can be hoped for by the methods that are being used at the present time. More thorough investigations by local boards of health from a carrier standpoint will eliminate many of the sporadic cases that are now appearing throughout the year.

The State, exclusive of Boston, has a rate of 4.7 per 100,000, which is a very low rate, considering the character of the population excluding its largest city. Boston reports a typhoid death rate of 3.4 per 100,000. Excluding the deaths from non-residents, the rate for Boston would be 2.5.

This death rate of 4.5 per 100,000 population is the lowest rate for this disease of any State, as far as official figures on the disease disclose.

THE NORFOLK STATE HOSPITAL.—In submitting their third annual report, the Trustees of the Norfolk State Hospital state with satisfaction that the past year has been one of much improvement in the Hospital equipment and in results attained. The construction of five new brick hospital cottages has given the Hospital for the first time a reasonable opportunity to separate its patients into independent colonies. This colony system provides the best available compromise between the special treatment of the individual and the general collective life which is usual in institutions, and the experience of the Hospital is that the further this colony life is extended and the smaller the groups become, the better have been the results obtained. During the past eight months the out-patient department has opened offices in Fall River, Lawrence, Salem, Brockton, New Bedford, Pittsfield, Greenfield, Northampton and Worcester. As to these stations the Trustees report as follows:

By means of them it has become possible for our medical officers to explain the nature of the work performed by the hospital, to interest physicians in various communities whose attention might not otherwise have been directed to the hospital, to examine prospective patients near their own homes, to maintain associations with former patients after they leave the hospi-

tal, to assist local probation officers in the disposition of the cases under their charge, and to shorten the residence of many patients at the hospital. In no other way have the true service and duty of the hospital been brought so clearly to the attention of the courts, and this association of the hospital and courts will, we trust, be of mutual helpfulness. When the hospital was inaugurated, it was regarded by judges merely as a place of detention for hopeless inebriates. The broader duties of the hospital and of its medical staff in their relation to the treatment of inebriety by the Commonwealth are only now being recognized. We are confident that more and more its physicians and administrative officers will be summoned by courts to consult with them in regard to the disposition of the procession of inebriates who are daily brought before them. Some of the courts have already utilized the hospital in this way, and its officers are ready to respond to any call for further service of this character. We recommend the gradual extension of the outpatient system to the other larger cities of the State.

SOCIAL SERVICE DEPARTMENT OF THE MASSACHUSETTS GENERAL HOSPITAL.—The eleventh annual report of the Social Service Department of the Massachusetts General Hospital covers the period from January 1, 1916, to January 1, 1917. The main body of this report is taken up by a series of short papers whose writers were the chief promoters of the activities they describe. These papers, taken as a whole, emphasize two facts: first, that the outside work of the Department as a whole becomes constantly further reaching; next, that its inner structure is being amplified and strengthened. The first paper describes how the volunteers, fifty-three in number, have organized themselves into a special department and entering, as a department, into relation with the social service organization as a whole. Previously each volunteer did her allotted task with but little chance to learn about the doings of her colleagues and still less to grasp the plans and purposes of the larger body whose interests they served. Another paper is an abstract of a noteworthy survey made in the neurological department, dealing with the problem of remunerative employment for the epileptic. The purpose of the survey was to ascertain exactly what the conditions were that made for success or failure in the case of each of the one hundred patients coming to the clinic, and to forecast the measures that must be taken to make the possibility for self-support a better one. Two papers of particular interest to the general subject are also included. The first is by Dr. Cabot, which presents the affirmative arguments for compulsory health insurance, and the other, by Miss Cannon, gives an impressive survey of the one hundred and twenty-six social service departments in the country connected with hospitals,

and calls attention to the variety of needs that led to their establishment. The report closes with a financial statement which shows no deficit for the year but that much increased contributions are needed if the department is to fulfill the purpose of its organization, in the community in which it is placed.

SPRINGFIELD ACADEMY OF MEDICINE.—The May meeting of the Academy was held at 137½ State Street, Springfield, on Tuesday, May 8, 1917, at 8.15 p.m.

Dr. Henry Jackson of Boston spoke on "The Electrocardiograph," illustrated with lantern slides.

This was the last meeting of the season. The next meeting will be held on September 11th.

Bond-holders are reminded that interest can be collected at any bank on and after July 1st.

The library will be open all summer; five new journals have been added to the list.

CARE OF INFANTILE PARALYSIS PATIENTS.—The Instructive District Nursing Association has arranged a series of lessons in the care of infantile paralysis patients to be given its nurses at the Charlestown, East Boston and Roslindale Stations, by nurses of the Children's Hospital who have been trained at the Children's Hospital.

INFANTILE PARALYSIS IN MALDEN.—One case of infantile paralysis has been reported in Malden, Mass. This is the first occurrence since last summer's epidemic.

PRIVATE WARD OF MASSACHUSETTS GENERAL HOSPITAL.—The new ward for paying patients at the Massachusetts General Hospital was opened for occupancy and received its first patients on May 16. This private ward is an extension of the Hospital and under its administration, but is designed to offer the facilities of a well-equipped hospital to those who are in circumstances to pay for their treatment.

"The building is eight stories in height, has a frontage of 160 feet and a depth of 53 feet. It sets back 33 feet from Charles Street, on the western part of the hospital grounds, fronting the parkway and the Charles River Basin. Separate entrances, independent of those of the general hospital, are provided. It has its own main and ambulance entrances.

The length of the building is north and south, so that all the patients' rooms have either morning or afternoon sun. At the northern end, extending to the east, is the service wing, so located as to cast no shadows on patients' rooms. A special architectural feature of the building is the series of superimposed verandas on the south end of the building, which are constructed of ornamental iron with high railings.

The building is of first-class fireproof construction throughout. The exterior, above the granite base course, is built of dark red brick

laid in Flemish bond, with limestone trimmings.

There are 102 rooms for patients, so arranged that they may be used singly or in suites of two, three or four rooms, with baths. The patients' rooms on the west front are provided with fire-places.

The first floor contains the administrative offices, patients' library and reception rooms. The second to the seventh floors, inclusive, are given up entirely to patients' rooms, with the necessary diet kitchens, utility rooms, nurses' sitting rooms, flower refrigerators, physicians' laboratories, toilets, etc. There are also a few patients' rooms on the first and eighth floors.

Along the north end of the building, on the eighth floor, are three operating rooms and a pathological laboratory with the necessary accessories. On the same floor on the west side, overlooking the Charles River, are two large sun parlors with fireplaces where convalescents may go on days that are too cold or windy for the verandas or roof garden. On the eighth floor are rooms for patients who are to stay in the hospital for a few days only. These are provided in order that the other floors may not be disturbed too often.

The kitchen in the basement has walls of enameled brick, slate floor and sanitary base."

PREVENTION OF MILK-BORNE EPIDEMICS.—In the effort to prevent or reduce the number of milk-borne epidemics in Massachusetts the State Health Department has recently issued to all local boards of health in this Commonwealth the following regulation, making reportable a group of infectious diseases easily transmitted by milk, when occurring in the household of any person engaged in milk production, transportation or distribution.

"It will hereafter be the duty of the officers in charge of any city or state institutions, charitable institution, public or private hospital, dispensary or lying-in hospital, or any local board of health, to give immediate notice to the State Department or the department's district health officer in every case coming to their notice in which typhoid fever, dysentery or diphtheria, scarlet fever or tonsillitis has occurred in the household of any person engaged in the production, transportation or distribution of milk for public sale."

Similar reports must also be made in every case in which these diseases have been due, or presumably due, to the consumption of milk infected with material derived from persons infected with the said disease.

MASSACHUSETTS DENTAL SOCIETY.—The fifty-third annual convention of the Massachusetts Dental Society was held at Springfield, Mass., on May 3, 4 and 5. The following officers were elected for the ensuing year: president, Dr. Frank T. Taylor of Boston; vice-presidents, Dr. G. C. Ainsworth of Boston, Dr. William I. Spears of Fall River; secretary, Dr. J. Arthur

Furnish of Boston; assistant secretary, Dr. Albert W. Day of Worcester; treasurer, Dr. Joseph T. Paul of Boston; editor, Dr. C. Edson Abbott of Franklin. The annual meeting of 1918 will be held in Boston.

SOUTH BOSTON HEALTH UNIT.—It is announced that another health unit, similar to the one which for the past year has been in operation in the West End, is soon to be established by the City Health Department in South Boston.

Eight distinct branches of work, represented by as many organizations, participate in these District Health Units, and South Boston and East Boston will soon have the benefits of the Health Department combined with the various nursing, charitable, dispensary, milk and baby hygiene associations. A physician will be in attendance at the Health Unit all the time, one or more nurses will be in attendance, ready to give any and all information regarding care and nursing of children.

Through the services of a Boston Dispensary district physician, residents of the district who are too poor to employ a physician, may secure treatment without being obliged to go into the city.

From the Consumptives' Hospital department special nurses will be provided and information and assistance will be given by the Milk and Baby Hygiene Association. To the representative of the Associated Charities one may refer any case where financial assistance is needed, and any case concerning people of Jewish extraction will be taken care of by a representative of the Hebrew Federated Charities.

The old building formerly used by Police Division 6, West Broadway, between B and C Streets, is being renovated for occupancy by the Health Unit of South Boston.

NEW ENGLAND NOTES.

CONNECTICUT.—The one hundred and twenty-fifth annual meeting of the Connecticut State Medical Society was held at New Haven on Wednesday and Thursday of last week, May 23 and 24. The following scientific program was presented:

WEDNESDAY, MAY 23, 1917, 2 P.M.

"Some Problems of State Health Organization," Dr. Kate C. Mead, Middletown; Discussion, Prof. C.-E. A. Winslow, New Haven (by invitation); "Treatment of Congenital Club Foot," (illustrated by lantern slides), Dr. Ansel G. Cook, Hartford; Discussion, Dr. Joseph F. O'Brien, Hartford; "Early Diagnosis of General Paresis," Dr. C. Floyd Haviland, Middletown; Discussion, Dr. Whitfield N. Thompson, Hartford; "The Differential Diagnosis and Treatment of Some of the Rarer Urological Conditions" (illustrated by lantern slides), Dr. Thomas N. Hepburn, Hartford; Discussion, Dr. A. C. Heublein, Hartford, Dr. E. J. McKnight,

Hartford; "The Treatment of Ectopic Gestation Based on Results Obtained on the Gynecological Service of the Hartford Hospital," Dr. Calvin H. Elliott, Hartford; Discussion, Dr. Phineas H. Ingalls, Hartford, Dr. T. Weston Chester, Hartford.

THURSDAY MORNING, MAY 24, 1917, CLINICAL SESSION.

Laboratory Demonstrations, Clinical Laboratory, Yale Medical School; "The Technic of Isolation of Pneumococci from Sputum in Pneumonia, and the Differentiation into Types," Dr. A. L. O'Shansky, New Haven (by invitation); Demonstration of Quick Method of Determining the Urea of the Blood, Dr. J. M. Slemmons, New Haven; Demonstration of Method of Determining the Alveolar CO₂, Dr. W. H. Morriss, New Haven; Demonstration of Syphilis of the Placenta, Dr. J. M. Slemmons, New Haven; "Cystin Crystals in Urinary Sediment," Dr. C. W. Comfort, New Haven.

Clinics were held in the New Haven Hospital, the Grace Hospital and the Hospital of St. Raphael. On the afternoon of May 24, the following papers were read, and the annual banquet was held at Hotel Taft on the evening of that day.

THURSDAY, MAY 24, 1917, AT 2.30 P.M.

President's Address, Dr. Samuel M. Garlick, Bridgeport; "Skull Fractures, Their Treatment," Dr. William Sharpe, New York City, Adjunct Professor Neurological Surgery, New York Polyclinic Medical School (by invitation), (illustrated by moving pictures); "The Mobilization of the Medical Profession," Dr. Joseph Marshall Flint, New Haven; "The Distribution of Fat in the Appendix and Its Relation to Inflammatory Processes," Dr. George M. Smith, Waterbury; Discussion, Dr. J. M. Flint, New Haven, Dr. A. A. Crane, Waterbury.

The following are the officers of the Society: president, Samuel M. Garlick; vice-presidents, George M. Burroughs, John C. Kendall; secretary, Marvin McR. Scarbrough; treasurer, Phineas H. Ingalls.

Massachusetts Medical Society.

NOTES FROM THE DISTRICT MEDICAL SOCIETIES.

BRISTOL SOUTH.—Dr. Charles A. Bonney, Jr., of New Bedford, has been appointed assistant surgeon at St. Luke's Hospital in that city.

EDWIN D. GARDNER, M.D.,
District Correspondent.

HAMPSHIRE.—Dr. Edward W. Brown of Northampton has been recently appointed

medical examiner for Hampshire County, to succeed the late Dr. Christopher Seymour. Dr. Brown is a graduate of Columbia College, New York City, and began the practice of surgery in Northampton in 1900.

Dr. Joseph D. Collins and Miss Margaret D. Lee were quietly married in Old Deerfield on May 21, by Rev. Patrick H. Gallen. Miss Lee is active in Red Cross work in Northampton, and is very popular socially. Dr. Collins is a graduate of the Harvard Medical School and has been practising laryngology in Northampton for the past few years.

Dr. Edgar H. Hughes of Northampton and Miss Florence A. Martindale, a senior at Smith College, were married May 21 in Holyoke by Rev. P. T. O'Connor. Miss Martindale is a daughter of Dr. J. Watson Martindale of Camden, N. J. Dr. Hughes has recently received a commission as lieutenant in the army medical corps, and expects to leave soon for active duty.

ELMER E. THOMAS, M.D.,
District Correspondent.

Obituary.

CHARLES EDWARD BUCK, M.D.

DR. CHARLES EDWARD BUCK, Boston—Tufts College Medical School, 1903; aged 58; a Fellow of the American Medical Association; member of the Massachusetts Medical Society—died at his home May 11.

Dr. Buck was born in Bucksport, Maine, in 1859. After graduating from the Philadelphia College of Pharmacy, he entered medical college, making a special study of diseases of children, to which subject he eventually devoted his entire time. He was one of the promoters in the founding of the Boston Floating Hospital for Infants and Children. In 1914 he was elected treasurer of the Middlesex College of Medicine and Surgery, at which institution he had spent a large part of his time with gratifying success. His love for children engendered a large clinic and through that fact he was enabled to secure a bequest of three hundred and fifty thousand dollars for the clinical departments of the college.

Miscellany.

THE MEDICAL SERVICE OF THE GERMAN ARMY.

THE *Army and Navy Register*, in its issue of May 12, 1917, has this to say as to a recent report on the efficiency of the German medical service:

"Of interest and significance are the contents of a special report made some months ago, and now just available in this country, by Colonel Hans Daee, head of the Norwegian Army Medical Service, who was given certain facilities during a tour of inspection in Germany last summer to study German military medical experiences for the benefit of his own service. That officer records his impressions of the 'smoothness with which everything worked' in the various medical depots in the way of accumulation and distribution of supplies. There was the thoroughness in the way of storage classification and index, and the completeness of the record was indicated by 'an exhibition of models of everything in use at the outbreak of the war and altered or invented during the war.' It is interesting to learn, for example, that one of the most radical changes effected during the war had to do with instruments and their cases. These were, in fact, discarded, the metal of which they were made being urgently needed for other purposes. To prevent rust, the cloth in which the instruments were kept, in lieu of the metal cases, was impregnated with paraffin. A sketch of each instrument was stamped on the cloth to show its proper place.

But it is in another particular that the comments of the Norwegian expert are of special value. He says that it was soon found that the organization of the medical service in the field must be thoroughly revised. Early in the war the infliction of a single casualty was the signal for a medical officer to be sent to the spot at once; in consequence, the medical service suffered great losses in the first months of the war. A similar mistake was made in establishing dressing stations before it was even comparatively safe to do so. It was not until casualties in the medical service had assumed alarming proportions that orders were issued that the military surgeons should not be sent here and there at the command of the non-medical staff, but should themselves determine when and where their services should be given.

Colonel Daee was duly impressed by the improvements wrought by this change of system. The medical officers, he says, became far more independent and were more respected than before, and that the heads of the medical branch were regarded by their associates of the line as of importance in the maintenance of the fighting power of the personnel. Perhaps the transformation was more conspicuous in Germany than it would be in another country, because before the war the medical officer was evidently 'regarded as a necessary but inferior official, by no means on the same footing as his fellow officers in the other services.' "

MARRIAGES

Miss Margaret M. Alexander, a graduate nurse of the Massachusetts General Hospital, and Dr. Ralph W. Dennen, junior surgeon at the Waltham Hospital, were married on, May 16, at the bride's home in East Boston. Dr. Dennen is a member of the Medical Reserve Corps.

RECENT DEATHS.

WILLIAM G. BRANSCOMB, M. D., of New Bedford, died at his home in that city on April 10. He was born at Vineyard Haven and was a graduate of the Medical College of the University of New York.

EDWARD W. AVERY, M.D., of Brooklyn, N. Y., died in that city on February 13. Dr. Avery was born in 1841, the son of Prof. Charles Avery of Hamilton College. After graduating from Hamilton College he attended the New York Homeopathic Medical College and the College of Physicians and Surgeons, graduating from the latter institution in 1866. During the Civil War he became an assistant surgeon in the United States Navy and later a surgeon in the Army. He enlisted as a surgeon in the German army during the Franco-Prussian War, and was with the troops when they entered Paris. Dr. Avery was the founder of the old Central Homeopathic Dispensary. He was a member of the Kings County Medical Society and of the New York State Homeopathic Society, and senior member of the Kings County Homeopathic Society.

ARTHUR VINAL LYON, M. D., a Fellow of the Massachusetts Medical Society, died at his home in Brockton, February 21, of cerebral hemorrhage. He was a graduate of Amherst College in 1884 and of Harvard Medical School in 1887 and had been a visiting physician at the Brockton City Hospital. He was 54 years old.

HALL STAPLES, M.D., died at his home in West Acton, Mass., March 7, aged 46 years. He was born in Windham, Me., Dec. 3, 1870, was a graduate of Dartmouth Medical School in 1892, and practised at Grafton, Vt., until 1912, when he settled at West Acton and joined the Massachusetts Medical Society.

GUSTAV JAEGER, M.D., whose name is familiar as an advocate of wool clothing for hygienic reasons, died recently at Stuttgart, Germany. Dr. Jaeger was born in Wurttemberg, Germany, in 1833, and was intended by his parents to become an evangelical minister like his father. He preferred the study of medicine and natural science at Tübingen. He received his doctor's degree here, soon turning his attention from zoology, to physiology, biology and hygiene. When, in 1859, Darwin published his "Origin of Species," Dr. Jaeger was one of the first of his disciples and he did much, through lectures and writings, to popularize the Darwinian theory.

WILLIAM F. SMITH, M.D., of Malden, Mass., died at the home of his father on May 16. Dr. Smith was graduated from Tufts Medical School in 1914, and became house physician at the Cambridge Hospital. While there he contracted pneumonia which developed into tuberculosis. He was president of his class at Tufts and was a member of the Massachusetts Medical Society and the Tufts Medical Fraternity.

J. O. HESSE, M.D., for many years a leading authority on chemistry of quinine and other cinchona alkaloids, died, on February 10, at Feuerbach, near Stuttgart, Germany, at the age of 82.

SIR WILLIAM TAYLOR, M.D., a surgeon-general in the British Army Medical Service, and late director general of the service in Great Britain, died, on April 10, at Windsor, England.